THE JOURNAL

OF

THE MEDICAL SOCIETY OF NEW JERSEY

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The MEDICAL SOCIETY OF NEW JERSEY has officially selected the plan of our Company for Accident and Health Insurance and the policy is available to Society members in accordance with the Company's rules and regulations for acceptance of risks.

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C. If the insured ceases to be an active member of The Medical Society of New Jersey.
D. If renewal is refused on all policies issued to all members of the Society, in which event 60 days prior notice in writing must be given.

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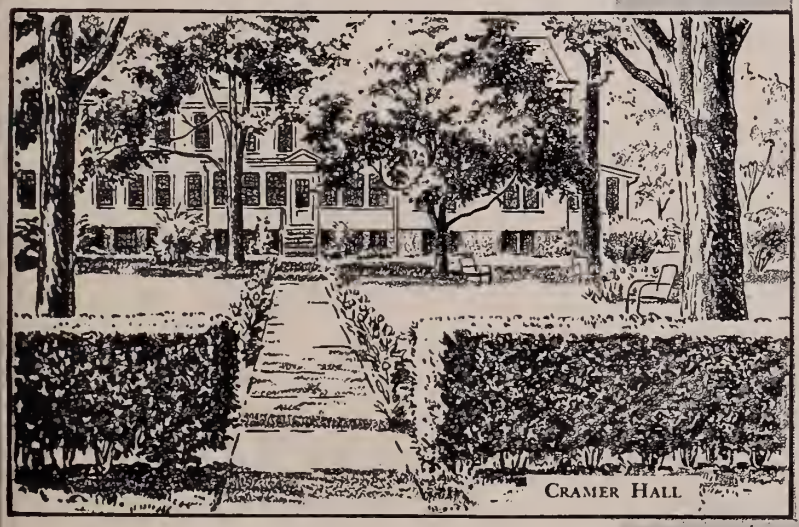
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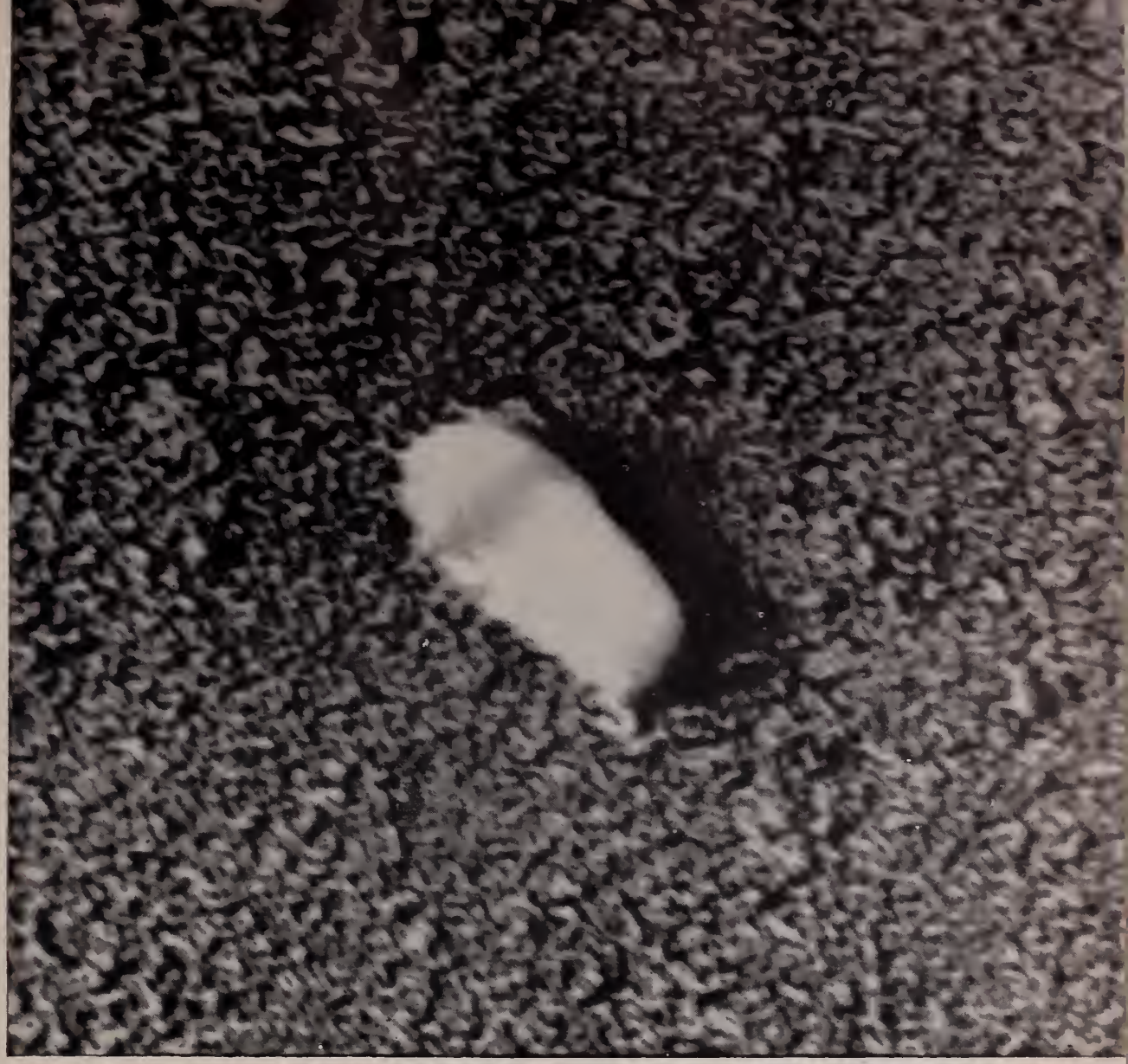

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1. Heller, E. M.: The Treatment of Essential Hypertension. *Canad. Med. Assn. Jour.*, 61:293, Sept., 1949.

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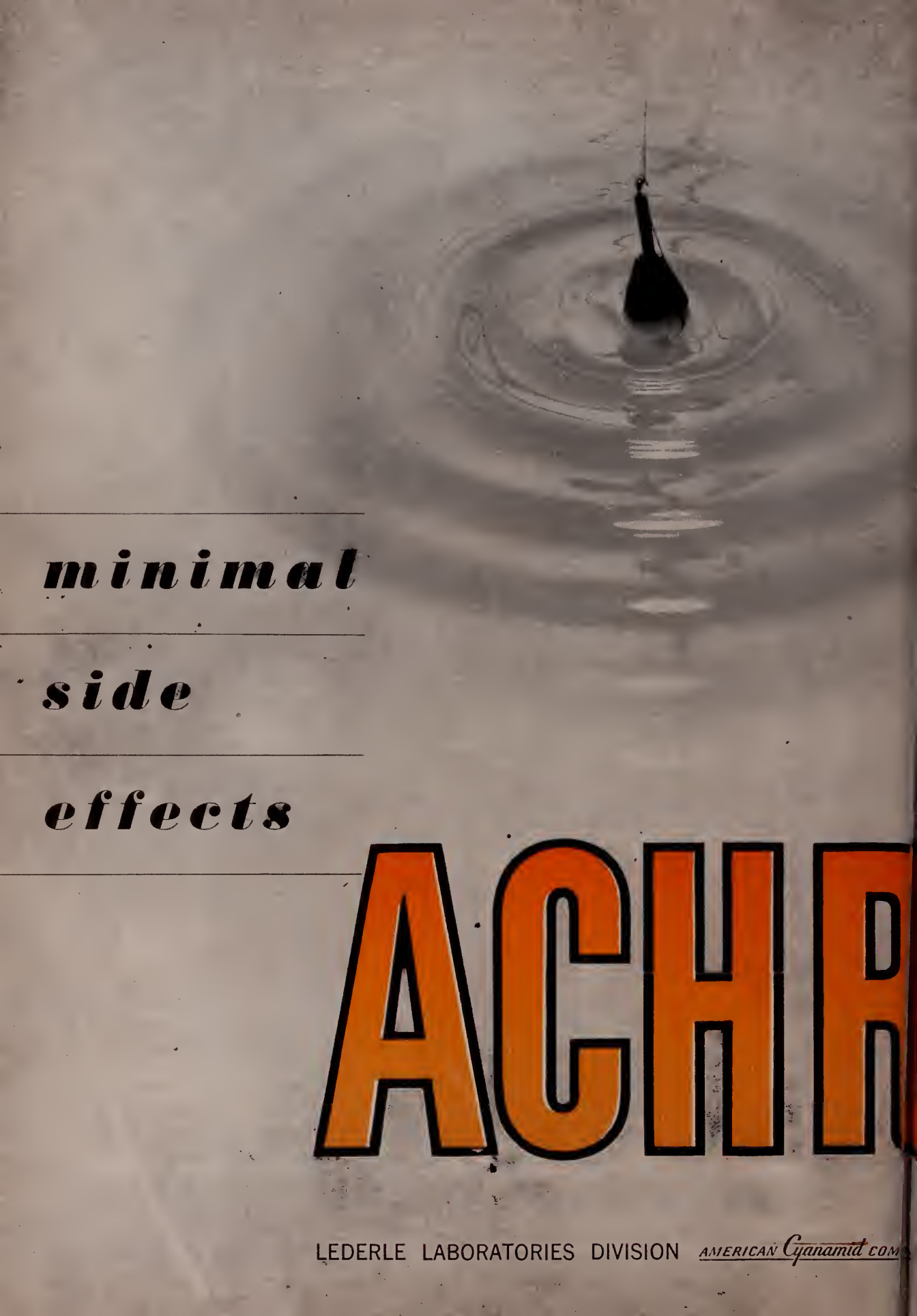

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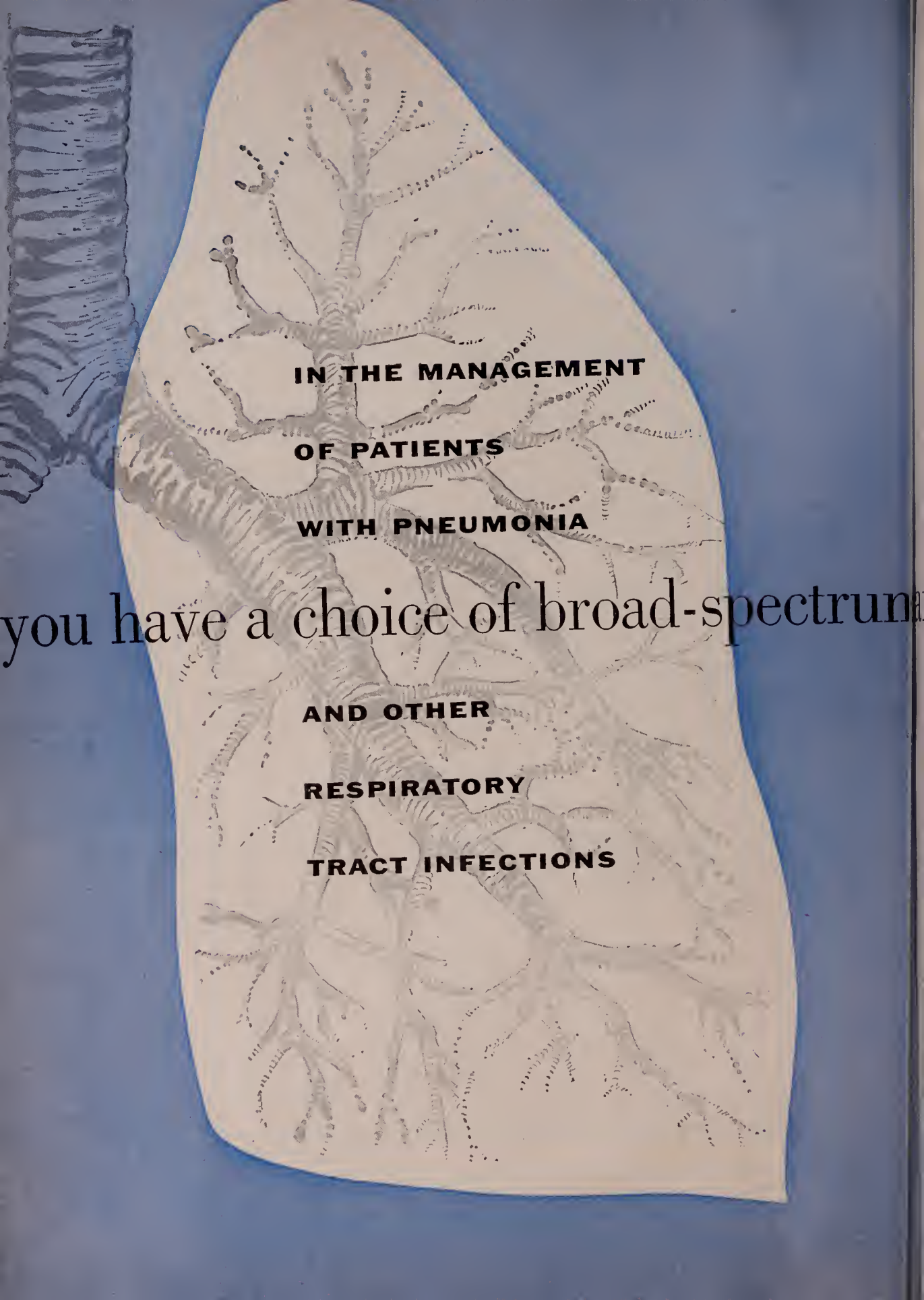
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1. *O'Regan, C., and Schwarzer, S.: J. Pediat. 44:172 (Feb.) 1954.*
2. *Waddington, W. S.; Bergy, G. G.; Nielsen, R. L., and Kirby, W. M. M.: Am. J. M. Sc. 228:164 (Aug.) 1954.*

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We gratefully acknowledge the advice and co-operation of many physicians in helping us to plan and supply a SUPERIOR SERVICE.

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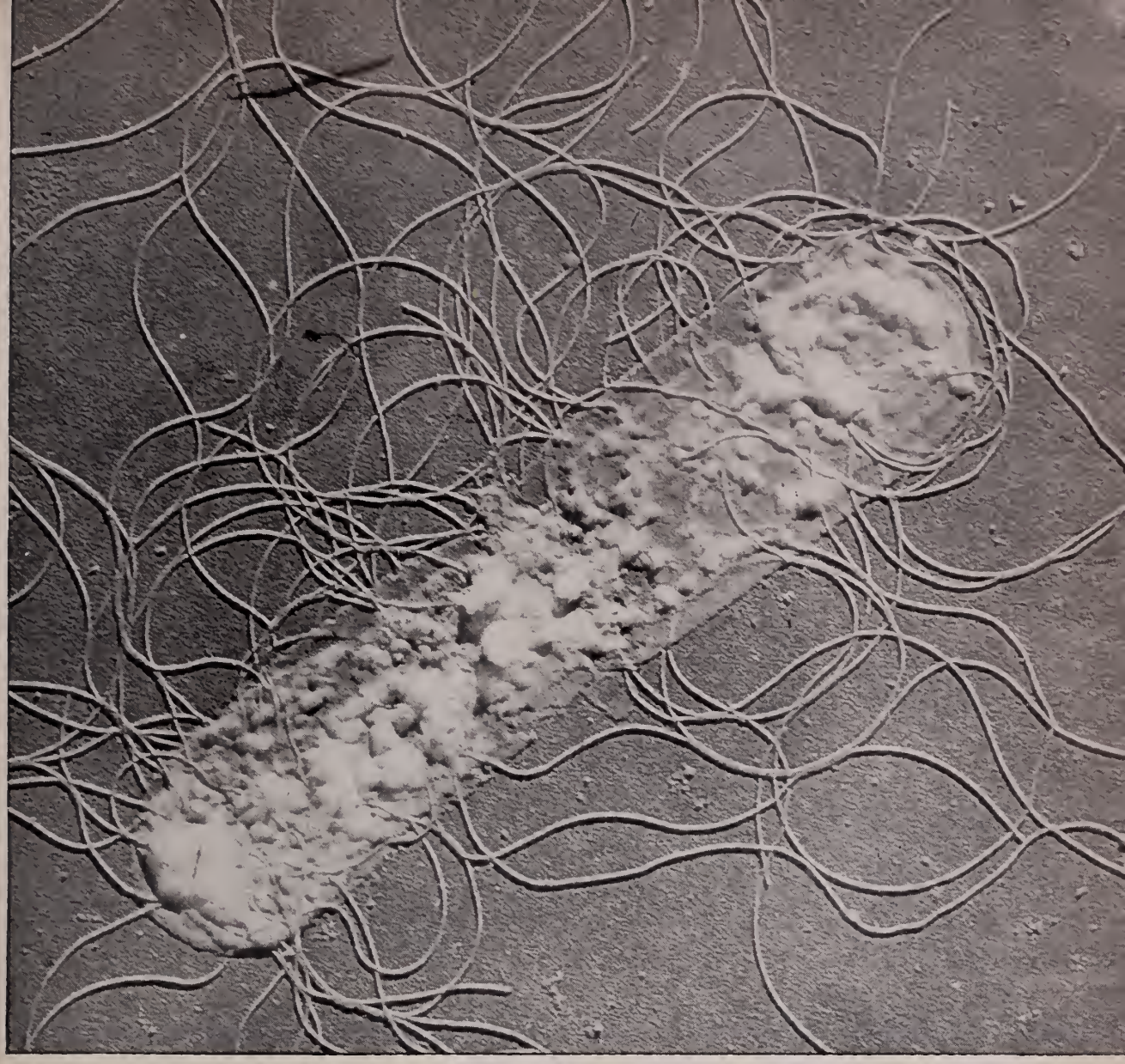

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Proteus vulgaris is a Gram-negative organism commonly involved in

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peritonitis following low perforation of the gut.

It is another of the more than 30 organisms susceptible to

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BRAND OF CHLORMERODRIN

NORMAL OUTPUT OF SODIUM AND WATER

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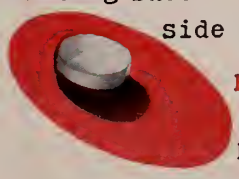

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Leadership in diuretic research

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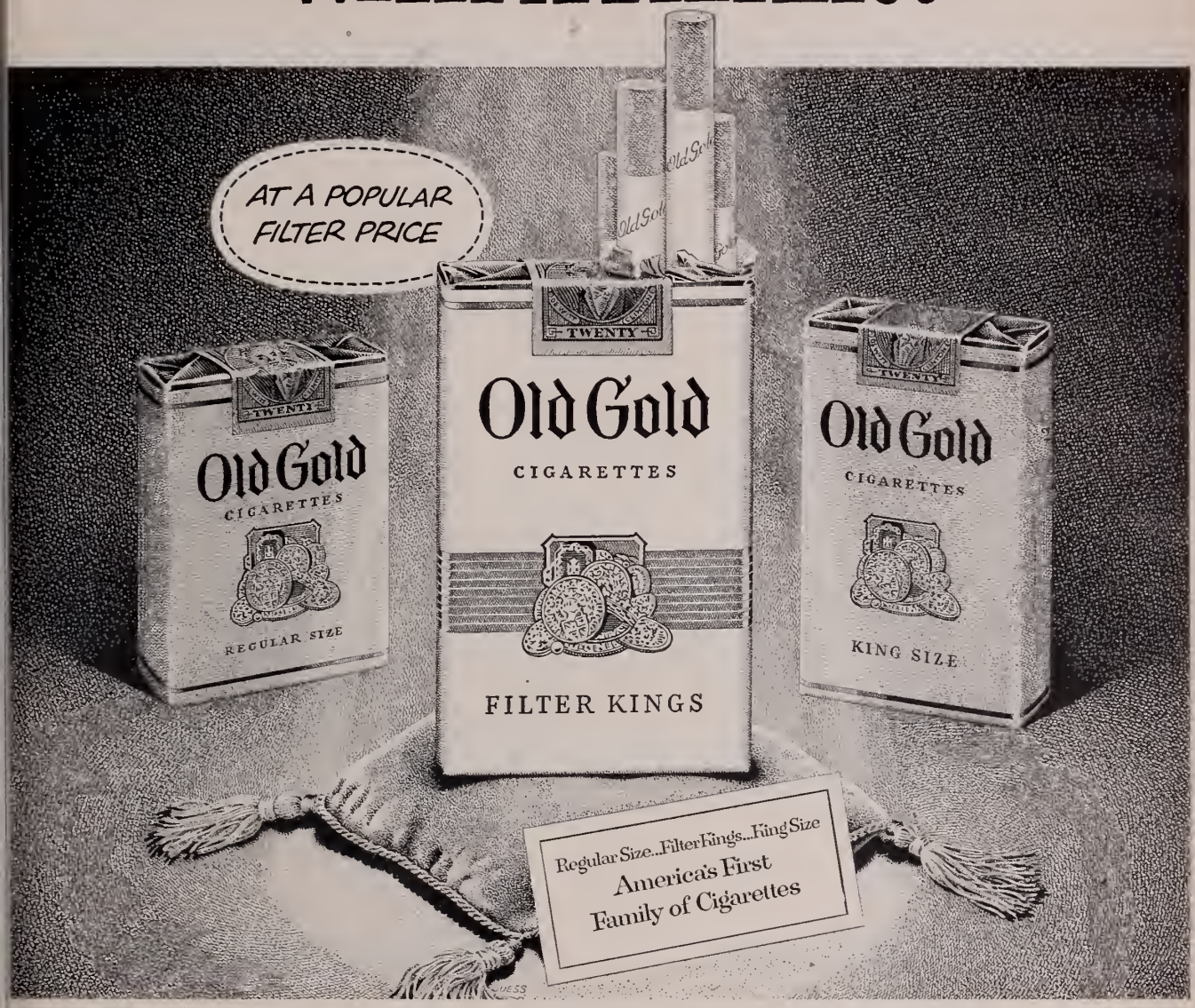

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Doctors: Today Old Gold Filter Kings are sold in most U. S. cities, and our distribution is expanding every day. If your city does not yet have Filter Kings, simply write to P. Lorillard Company, 119 W. 40th St., New York 18, N. Y., and special arrangements will be made to make them available to you.

P. Lorillard Company
Established 1760

Meat...

in Geriatric Nutrition

Although the nutrient needs for optimal health in the aged are not known to differ significantly from those in younger adults,[1] it has been shown that the daily protein requirements in elderly patients vary from person to person. Ascertained values range from below to above allowances recommended for persons in earlier years of adulthood.[2]

According to criteria such as "physical activity, gastrointestinal structure and function, pathologic disturbances, and chemical balances," it is suggested that an optimal diet for the elderly patient should provide at least 20 per cent of its calories in the form of protein.[3]

For several reasons this high intake of protein appears desirable. Decreased activity in the aged tends to induce loss of tissue protein. Preservation of protein enzymes and of endocrinal harmony necessary for supporting anabolic processes requires adequate protein nutrition. Also, the aged person usually is able to handle the end products of protein metabolism satisfactorily.

Generous amounts of tender lean meat can go a long way in supplying the needs of the aged for top quality protein. From 25 to 30 per cent or more of cooked lean meat is protein. Other valuable contributions include the B group of vitamins and essential minerals, especially iron, phosphorus, and potassium. The easy and almost complete digestibility and the palate appeal of meat constitute physiologic values important in the nutrition of the geriatric patient.

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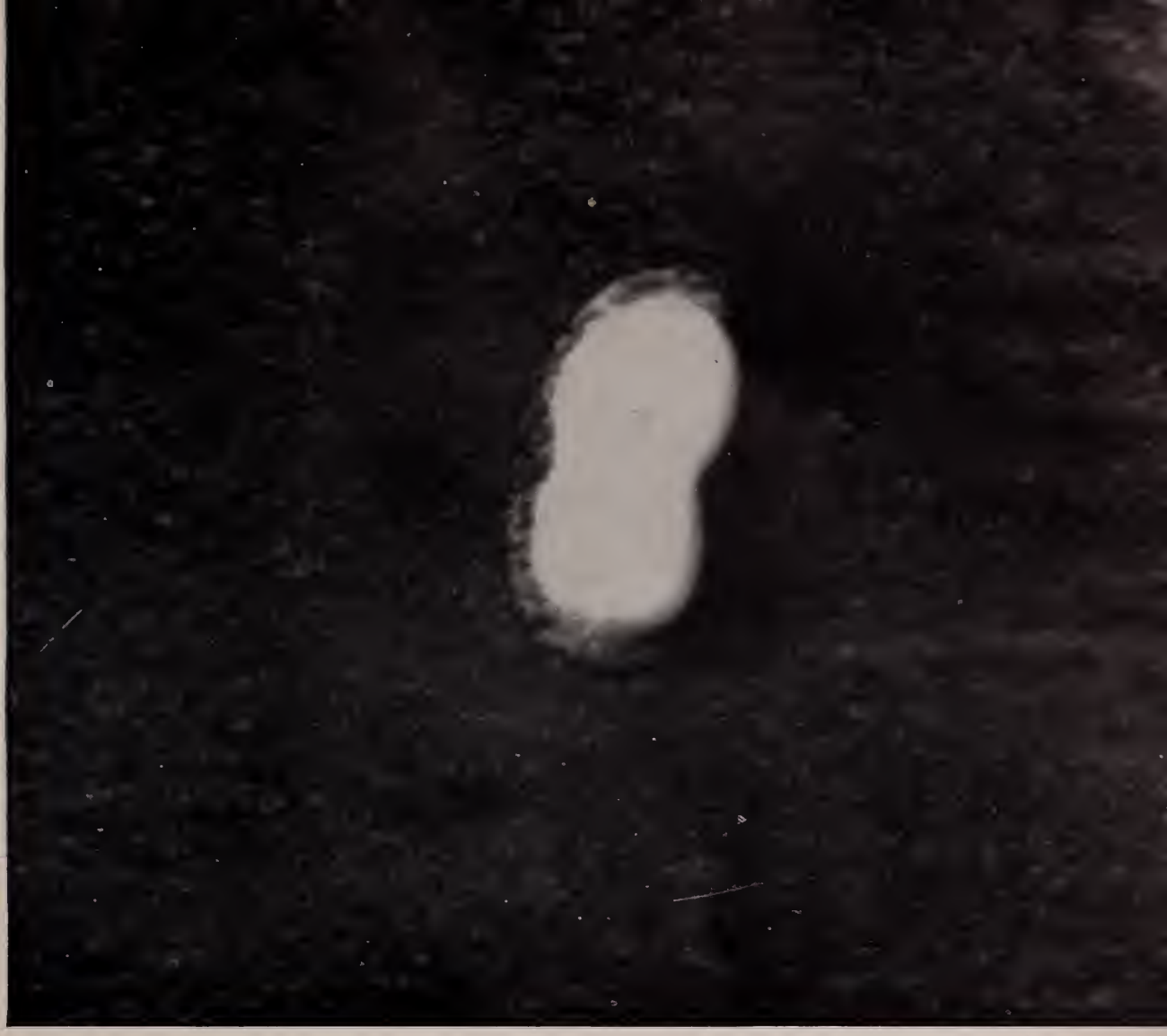

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Diplococcus pneumoniae 44,000 X

Diplococcus pneumoniae (Streptococcus pneumoniae) is a Gram-positive organism commonly involved in

lobar—and bronchopneumonia • chronic bronchitis • mastoiditis • sinusitis otitis media • and meningitis.

It is another of the more than 30 organisms susceptible to

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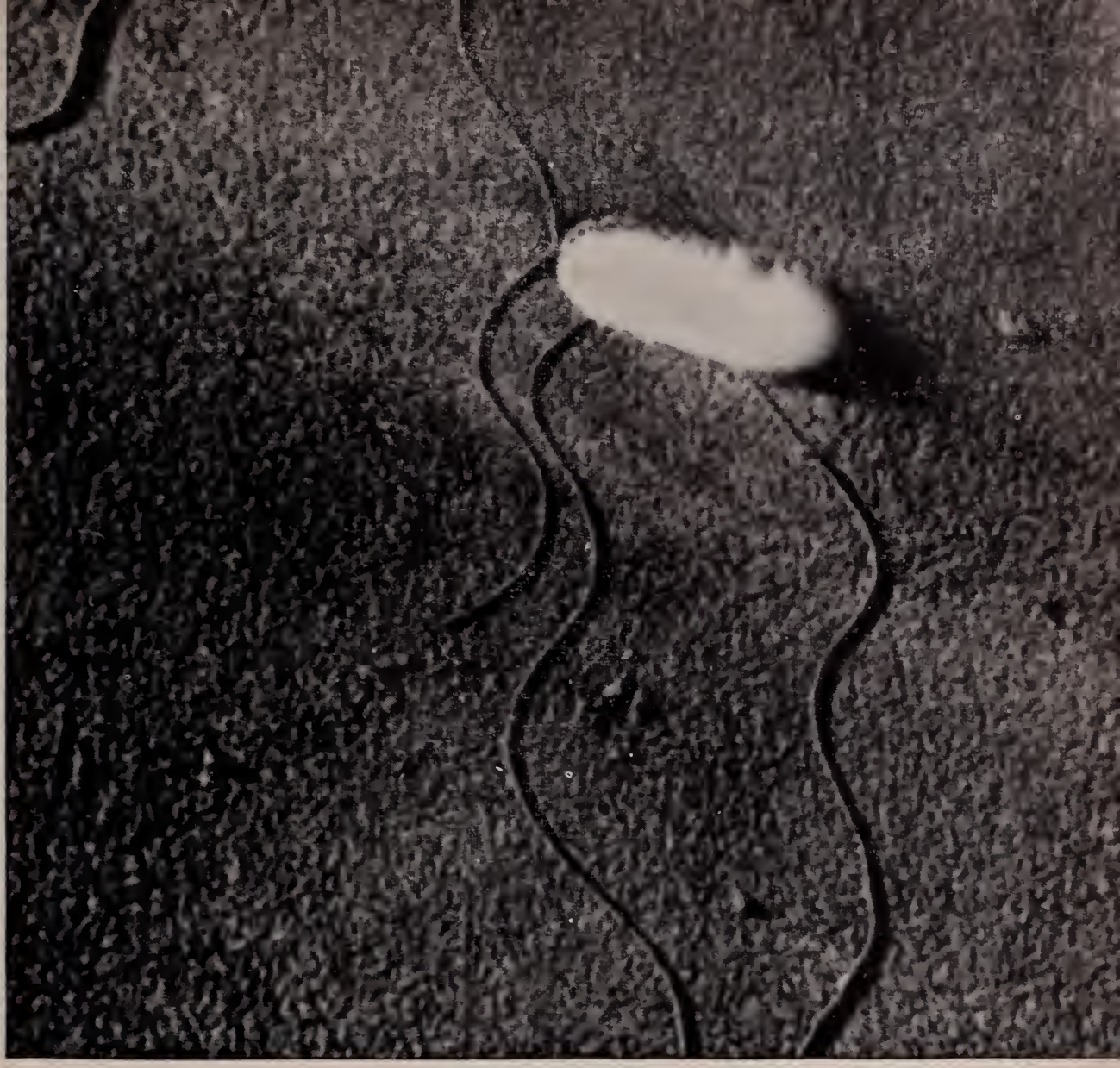

ELECTRON PHOTOMICROGRAPH

Salmonella paratyphi B 32,000 X

Salmonella paratyphi B (Salmonella schottmuelleri) is a Gram-negative organism which causes

food poisoning • chronic enteritis • septicemia.

It is another of the more than 30 organisms susceptible to

PANMYCIN*

TETRACYCLINE HYDROCHLORIDE

100 mg. and 250 mg. capsules

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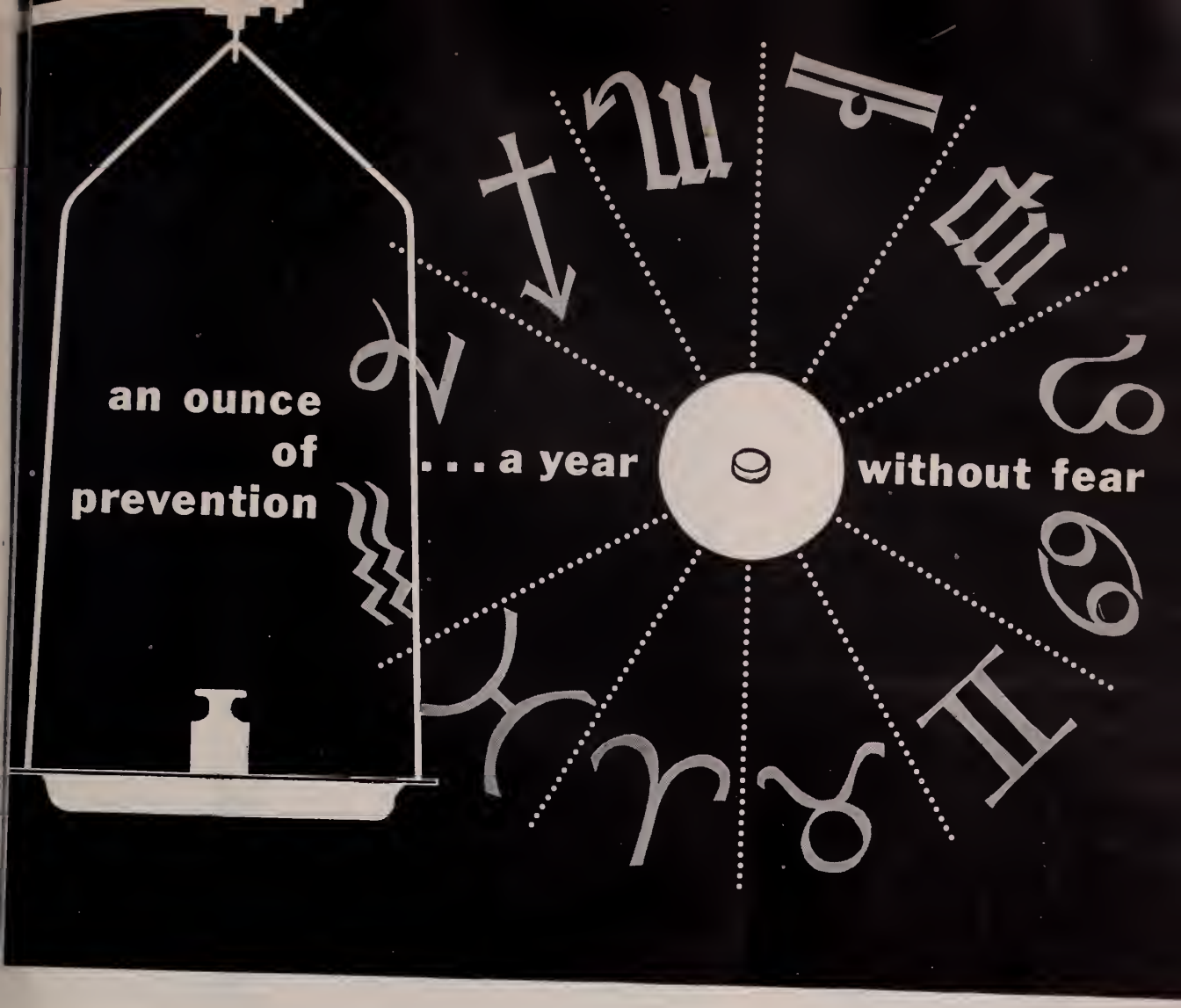

for the patient with angina pectoris

With Peritrate, the long-acting coronary vasodilator, an ounce of prevention (28,350 mg. of Peritrate) lasts a full year or longer, since only 10 or 20 mg. are needed to protect most patients for 4 to 5 hours. Yet, no arithmetic formula can adequately define the effectiveness of Peritrate in providing dramatic relief from pain and from the fear of anginal attacks.

According to tests made by Russek and coworkers, Peritrate is unexcelled in exerting a prolonged prophylactic effect in angina pectoris. The results achieved ". . . were comparable to those obtained with glyceryl trinitrate (nitroglycerin), but the duration of action was considerably more prolonged."[1] Patients on Peritrate generally exhibit significant EKG improvement,[1,2] and their need for nitroglycerin is often reduced.[3] A continuing year-round schedule of 10 or 20 mg. 4 times a day will usually:

1. reduce the number of attacks (in 8 out of 10 patients[2,3]);
2. reduce the severity of attacks not prevented.

Available in both 10 mg. and 20 mg. tablets and, for extended night-long protection, in Enteric Coated tablets (10 mg.).

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because the new coating dissolves this fast...

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ur patients get high blood levels in 2 hours or less

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Erythrocin® STEARATE

(ERYTHROMYCIN STEARATE, ABBOTT)

disintegrates faster than enteric-coated erythromycin

filmtab*

Erythrocin . . . *for faster absorption*

New tissue-thin *Filmtab* coating (marketed only by Abbott) starts to disintegrate within 30 seconds—makes ERYTHROCIN Stearate available for immediate absorption. Tests show Stearate form definitely protects drug from stomach acids.

filmtab*

Erythrocin . . . *for earlier blood levels*

because there's no delay from an enteric coating, patients get high, inhibitory blood levels of ERYTHROCIN *in less than 2 hours*—instead of 4-6 as before. Peak concentration is reached at 4 hours, with significant levels for 8 hours.

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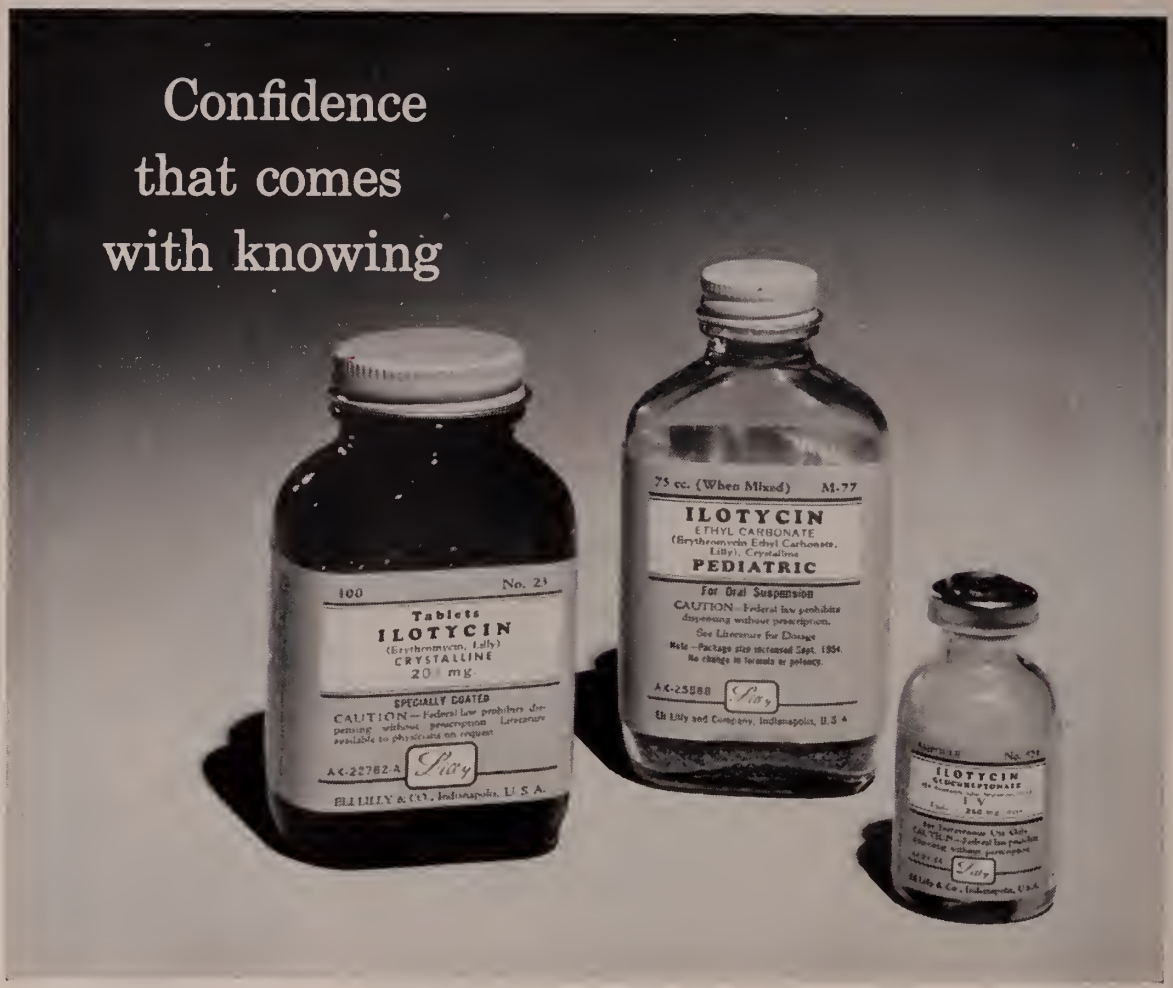

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THE JOURNAL
OF
THE MEDICAL SOCIETY OF NEW JERSEY

Editorials • • •

Happy New Year to Our Advertisers

It is a fashion today to look with jaundiced eye on advertisers and on advertisements. Cynics would have us believe that advertisements are manufactured out of fantasy, fiction or fraud, conjured up to coax dollars from gullible readers. Advertisement is even pictured as an expensive and parasitic superstructure on the economy of the country.

With respect to advertisements in newspapers, billboards, or general magazines, the JOURNAL can pass no judgment. But when it comes to advertising in medical periodicals, we do have some expertise. Advertising of appliances, services and drugs makes possible mass sales of these items; and this in turn, makes possible lower costs. The net result is lower rather than higher prices to the medical public.

Advertising makes possible this, and almost every other medical journal in the country. Or at least, it makes it possible to give you a journal at a trifling cost. Advertising shows where to get sound products. It gives you compact data about drugs, doses and appliances. It tells you of the availability of specialized services. We publish these advertisements as a service to our readers as well as a source of income for our Society. And the responsible American pharmaceutical and surgical trade industries have long since abandoned misleading advertising claims. Their advertising copy is solid; if it also trumpets the company's virtues that is only to be expected. The author of a scientific article also focuses on his successes.

The partnership between medical organizations and the responsible members of the surgical and pharmaceutical industries has made possible better medical conventions and better medical journals. So it is with no cynicism that we of the JOURNAL wish a prosperous New Year to those* who have had enough confidence in us to place their advertising notices in these pages.

*List of 1954 advertisers on pages 6A and 7A.

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MIRIAM N. ARMSTRONG, Assistant Editor

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Whole Number of Issues 605

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With Their Boots On

One of the major reasons for A.M.A. resistance to social security for M.D.s is the fact that so few physicians retire at age 65. A recent study shows that there are now some 23,000 physicians in the country between the ages of 65 and 74. And of these, 19,000 are still in active practice. That amounts to 84 per cent. And we all know some over the age of 74 who are engaged in vigorous and valuable medical activities. Actually, the effective ratio of over-65 doctors in practice is even higher than the indicated 84 per cent, because the "not-in-practice" group includes a great many women physicians who had become housewives many years ago, plus a fair number who were actively working, but employed on salary.

One wonders whether any other profession can boast of so long a span of active service. The trend is the other way around: towards earlier retirement. The traditional "30 year service" prerequisite for retirement was generous enough because many entered the profession, the trade or the craft at age 25 or 26. But now there is talk of 25 year service prerequisites. It has opened up new fields in providing activities, interests and entertainment for retired people in their 50's and 60's.

In medicine, however, that trend is not noticeable. The replacement of the horse and buggy by the automobile, and the waning of house calls, have combined to reduce the physical load on the doctor. Much medicine today is practiced at the desk, looking at x-ray and laboratory reports, writing notes or filling out forms. The actual practice of medicine need not be a back-breaking chore. The physician of 70 who has preserved his clarity, becomes a shrewd, experienced and highly valued medical practitioner.

Besides, in private practice there is no supervisor to tell you when to retire, no time clerk to toll off the years and announce that your hour has come. Sometimes an Alzheimer's Disease makes itself apparent to the observer, if not to the victim. And so, the doctor—whether rambling in his anecdotage or whether sparkling with wit and keenness, keeps plugging until one day he dies. With his boots on. And perhaps that's the way we all really want it.

America's Expanding Medical Schools

Critics of the medical profession who have been wringing their hands over an alleged shortage of doctors and a scarcity of teaching facilities will find no comfort in the latest annual report on medical education in the United States. This report tells a story of continued expansion to produce an ever-increasing supply of well-trained physicians. Among the highlights:

The number of doctors is at a record low ratio of one for every 730 persons, the second best ratio in the world. This proportion was exceeded only by Israel.

The nation's medical schools have record total enrollments and graduating classes and the largest freshman class.

Ten new medical schools are scheduled to begin operation wihin the next six years, and three more are under consideration.

The opinion of many medical education experts is that the problem in the future may be shortage of qualified applicants rather than a shortage of teaching facilities.

Only 21 per cent of the freshmen entering medical school last fall had "A" averages in their pre-medical studies. Apparently, you don't have to be a grind, bookworm or Phi Beta Kappa to get into medical school today.

WILLIAM H. MCCALLION, M.D.
Elizabeth

The Old Doctor . . . and the New*

Instead of a wistful nostalgia for the good old days when every doctor was universally respected, Dr. McCallion suggests a modern way of life that may restore the doctor to the place he once held in the esteem and affection of the community.

JUST 85 years ago, fourteen civic-minded and far seeing medical practitioners in this area came together to establish the Union County Medical Society. They handed to us a glorious heritage, for certainly they founded this Society for the welfare and protection of this community rather than for their own welfare and protection. Since then we have grown from 14 to 536 members. Can the 536 of us match our fourteen predecessors in sense of value and in appreciation of responsibilities to the public? Are we worthy of this heritage?

Many have called this a "sordid age." And while there are those who thus disparage this era, there are others who consider it the most glorious in the calendar of ages. Whether for better or for worse, however, it is certainly a different age: this post-World War 2 period of 1954 compared with the post-Civil War America of 1869.

The poisoned dart used by primitive tribesmen in warfare has been replaced by the geometrically predictable and destructive accuracy of the guided missile; the man-worked farm has succumbed to the mechanically-tilled earth; and the preceptor method of "reading" medicine, in vogue eighty-five years ago, has inevitably yielded to ever-changing educational procedures in medicine, many of which are unreasonable, indeed, and some oft-times ruinous to the health of the medical student. These changes have caused the "glorious days of medicine" to become the nostalgic theme of the popular novelist of this day; or so it seems: the traditional basket of eggs proffered the country doctor, as compensation for services rendered is often compared to the medical fees of today—admittedly excessive, on occasion, you will agree. Biologic and pharmaceutic specifics—all too expensive when you consider manufacturing costs—have placed prayer and penicillin in open competition. Have these inevitables of invention and discovery impregnated us with an attitude of complacency, too often interpreted by the public as an indication that we no longer "care"? To be sure, some of these advances have had their disadvantages, but, far-and-wide they all have been good, not only for the present generation but also for posterity. Have these miraculous discoveries and specific remedial agents caused us to lose sight of the *host* to the disease while we glory in the victory over the disease. Have we gone out into the highways and byways to gaze upwards to the sun, the stars and the moon while we have by-passed the most inter-

*Presidential Address, Union County Medical Society, April 14, 1954.

esting exhibit of all; Man himself?

I have a feeling that many sick patients resent enthusiastic bedside demonstrations and the created commotion over the magic yieldings of disease to the specifics at hand, while the doctor apparently completely ignores the unhappy host to the affliction. Have we left the patient with the feeling that it is his *ailment* which absorbs our interest and attention, without consideration of the sum total of his personality and character? There are obvious faults—some of them deeply, if unconsciously permitted to take root—in this modern day of easy practice. Some of these are portentous of evil, and will travel from evil to disaster if we do not take stock of our relationships with our patients. All of this creates for the profession an unhappy, dissatisfied and disturbed public.

One has merely to turn the pages of the dailies or to thumb through a popular periodical to be faced with all kinds of printed indictments—including those which accuse us of having lost both our purity and our chastity. Often, in these startling and offensive articles, we are charged with looking upon the flowing curves of the dollar sign as symbols of prestige and success. In this day of scientific discovery, of modern diagnostic implements and advanced facilities, we are constantly branded as being more machine-like and less humane. These analyses of the individual physician have become so inclusive with such shocking rapidity so that the large physician body is the subject matter for their relentless lashings.

We may well stop to ask ourselves if there is something inherently wrong in our manner of dealing with the sick public. Unless a particular author has a feeling of nostalgia for the dear old gentlemen of yesteryear, we no longer encounter the lovable character embodied in the old family physician. It would be unreasonable to hope for the reincarnation of this unique character. Not affected too seriously by time and change, the old practitioner did not accumulate barnacles, but his lineal descendants are accused of hauling extraneous matter as they travel down the avenue of their professional lives. In retrospect, contrast the portrayal of the old time physician with those of us today. Note how we, as individuals and as an organized group, suffer by the comparison. Is there something fundamentally wrong with our manner of conduct with the patient in this day of "speed and money neurosis"? One has merely to open any modern book about doctors, to read with startling and shocking repetition such words as—ostentatious, egotist, empty vanity, incomplete, superficial, weak, hypocritical, deceptive—and scores of others as uncomplimentary. Here are indicting words set in cold type, castigating us as individuals and as members of what is, after all, one of the noblest and most self-sacrificing of callings. Are these word-mechanics ill-tempered frustrates, aggrieved individuals, bilious belly-achers or are they junior senators on a literary rampage? It would, indeed, seem that we have taken ourselves for granted, and that we have permitted ourselves to drift away from the confidence of the patient.

There never has been such an appropriate time for the individual physician to influence our public relations. Never has his assistance been more sorely needed to combat the erroneous propaganda moulded by the ludicrous exaggeration of a few. Are we, individually and collectively, responsible for the prevalent idea that a young man should study medicine for philanthropic reasons? Should we attempt to answer our harsh critics—whether they be politicians, union leaders or professional rabble rousers? With all propriety, should not we point out to these critics that practitioners of medicine—like those in other honorable professions—must sell their services to exist in today's high-priced economy? On the other hand, should we not challenge the insinuation that we are devoid of all regard for professional duty unless we are handsomely compensated? On every side we see those in high places exerting every influence to reduce us to mere medical tradesmen. Should we be apologetic and—with tongue in cheek—plead our cause? Or should we seize every opportunity to bring to the attention of those who would deprecate us that ours is a vocation and a profession and not a trade? It is imperative that we take every opportunity to make clear to the public at large

that we are different from the tradesman whose sole aim is pecuniary. It is incumbent upon us, individually and as an organized body to restore ourselves to the hearts and confidences of a confused public. To deny that we have *some* pecuniary interest in our work would be sheer hypocrisy. But we must also make it clear that we are freighted with the continuous desire for the welfare of the community we serve. We are honestly devoted to reducing the incidence of disease, for instance, even though it is not in our pecuniary interest to do so.

Those who incriminate us constantly clamor for a re-examination of our principles of ethics. They demand that we revise our "morals," and urge us practically to donate our professional services—under penalty of being labelled "selfish." When it comes to making moral judgments, I submit that our profession is—as it should be—in much better ethical position than is our industrial or commercial world. We still retain the practical idealism that motivated the fourteen founders of this Society. If here and there, some of us do stray off the reservation, let it also be pointed out that (with the possible exception of the clergy), there is no other profession blessed with so consistently high an ethical sanction; no other profession that so guides and disciplines its members, so effectively polices itself in the ethical arena.

Severe and unreasonable indictments are brought against us. In the face of this we are complacent. Let us forsake this smug complacency and do honorable battle. Let us be moved to defend the Principles of Ethics to which our Society unyieldingly adheres. Let us use every means to combat the wide-spread idea that our Principles of Ethics are selfish and outmoded, that their main purpose is to give us unapprehended liberties or to coerce or rob the public. Have you *ever* sat idle while patients or the public were upbraiding the very Code which protects them? Did *you* display resentment and use intelligent logic to show them how our Principles of Ethics work basically for their benefit? Or have you, perhaps, never read the *Principles?*

Our ability to combat disease is taken for granted. Let us strive to regain the confidence of the public by employing good community relations to combat erroneous, unfair and unfounded charges. Today's physician has the golden opportunity to bring back much of the respect and confidence which has been lost in our changing world. There are but few among us who do not have as great an appreciation and regard of duty and responsibility to the patient and to the community as did those 14 founders of our society. Are you and I to be less conscious than they were of their human and social ties and responsibilities? To be sure, their professional status seems to have been more honored and less questioned in the 1860s than it now is in the 1950s. This very fact is but an added challenge to us. *They* enjoyed peculiar and special distinction in the hearts of their fellow-citizens, even though they were unequipped with sulfa drugs and sphygmomanometers. Surely we, so much better equipped professionally, ought to be able to do as well in terms of winning and holding a special place in the hearts of *our* fellow citizens.

LET me close with a paraphrase of the ancient oath of "The Young Men of Athens." Though 1600 years old, this Oath could well be the guide and gospel of all medical societies today.

> "We shall never bring dishonor to this, our Society, by any act or deed or neglect of duty, nor ever desert our comrades in the ranks.
>
> "We will fight for the ideals and sacred ethics of the Society, both alone and with many. We will revere and obey the Society's laws and do our best to incite a like respect and reverence in those who are prone to annul or to set them at naught. We will strive unceasingly to quicken the public's sense of our unselfish service.
>
> "Thus in all these ways we will transmit this Society not only not less but greater, better and more beautiful than it was transmitted to us."

722 Westminster Avenue

Irving Shapiro, M.D.
Newark

Estrogens and Acne*

Locally applied sodium estrone lotion and cream are shown to have produced satisfactory remission in severe x-ray resistant acne.

Encouraging results[1] in the treatment of some cases of acne are reported using estrogens, orally[2] and locally.[3] Here, I consider only "classic" acne and not acneform eruptions produced by industrial, chemical or physical irritation.

Authorities differ on the relative roles played by foci of infection, diet, hormones and bacteria. There is, however, general agreement that androgen is a prime factor since:

1. Acne usually appears at puberty when androgen titers rise.
2. Acne does not develop in eunuchs or castrated males.
3. Androgens produce acne in eunuchs and in women with normal skins.
4. Acne improves in eunuchs when androgens are withheld.
5. No other single factor (emotional, diet, bacteria or foci of infection) produced acne in eunuchs and castrates the way androgens did.
6. Androgens thicken and coarsen[4] the skin. Withholding causes peeling and finer texture to appear.

The effectiveness of systemic administration of estrogens[5] in some cases of acne has now been established. Andrews[3] used oral stilbestrol and antibiotics and reported excellent results. But he warned of side actions from either drug.

A sober note was struck by White[6] who found 17 KS excretion depressed without improvement in the acne when oral stilbestrol was given.

In many respects the "local versus systemic" estrogen approach to acne parallels the problem posed by gonorrheal vulvo-vaginitis in the child some years ago. Then, oral estrogens produced a cure with a high degree of systemic symptomatology. With local administration of estrogens, treatment was also successful but with fewer side effects.

This parallel became more apparent when Becker[1] re-examined 17 KS levels in acne and found no significant variation from a normal level. Once more Sulzberger's thesis that acne simply represented an individual pilosebaceous reaction of an extreme type was confirmed.[7]

Orthodox x-ray therapy atrophies the involved sebaceous glands without affecting the

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*Read before The Medical Society of New Jersey, Atlantic City, May 17, 1954.

1. Becker, F. T.: The Acne Problem, Arch. Derm. & Syph. 67:173 (1953)

2. Shapiro, I.: Topical Estrogens: Effects and Side Actions, J. Clin. Endo. 12:751 (1952)

3. Andrews, G. D.: Treatment of Acne, J.A.M.A. 146:1107 (1951)

4. Hamilton, J. B.: Male Hormone: Prime Factor in Acne, J. Clin. Endo. 1:570 (1941)

5. Lawrence, C. H. and Werthessen, N. T.: Treatment of Acne with Orally Administered Estrogens, J. Clin. Endo. 2:636 (1942)

6. White, C. B. and Lehmann, C. F.: Diethylstilbestrol Therapy of Acne, Arch. Derm. & Syphil. 65:611 (1952)

general secretory pattern. Unfortunately this technic requires specialized training and equipment. Many patients are too young or relapse after a course of roentgen therapy.

Since estrogens oppose and antagonize sebaceous stimulation of androgens without systemic effects [8] this approach seemed rational and "etiologic."

In my office for the past six years, cystic pustular, stubborn and resistant cases of acne were treated with topical alcoholic sodium estrone (Premarin®) and a sodium estrone [9] in vanishing cream (Premarin Cream®). Within 6 weeks a remission was induced in 85 per cent of these cases.

In an earlier paper [10] I reported good results in facial acne using a sodium estrone in vanishing cream with no benefit to the untreated involved back or chest. The *Year Book of Dermatology and Syphilology* editors commented [11] that these dosages could produce systemic effects, and depress androgens and 17 KS. They set up an experiment in which this 2.5 milligram estrogen cream (Premarin®) was applied to only half the affected face and a placebo to the other half in typical acne.

Results of this experiment by Sawicky *et al.*[12] concluded that there was no evidence of systemic absorption and great improvement was noted on the hormone treated side in males with cystic acne. Eighty-eight per cent of their patients improved markedly from 6 weeks on. Poor results were reported in less time.

MATERIALS AND METHODS

Two preparations were studied, one consisted of 2.5 mgm. per Gram water soluble estrogenic substance equine (Premarin Cream®) in a vanishing cream base. The other was 1 mgm. per cubic centimeter estrogenic substance in 70 per cent alcohol (Premarin Lotion®).

A cotton applicator was used to apply the lotion twice a day for 4 to 6 weeks. The average daily dose consisted of one or two cubic centimeters of the lotion or 1 to 2 Grams of the cream. This amount would be enough to treat an area 6 to 8 inches square. When the skin became less oily only one bedtime application was used. Stubborn patches received extra attention. No other treatment was given, no diet followed.

Cases chosen were over five years' duration, severe scarring types which had relapsed after x-ray, vaccine, diet and other therapy.

RESULTS

In about 80 per cent of chronic severe acne cases a remission was produced using topical Premarin® in 70 per cent alcohol twice daily for 6 weeks. Then sharply reduce dose otherwise systemic effects may become evident. Usually clinical improvement locally appears first, then systemic effects are noted later unless dosage is reduced. Stubborn areas require more persistent attention. Only 5 per cent of these cases required a stronger and another 5 per cent a weaker concentration to produce initial results.

Once improvement sets in (oiliness sharply reduced) the dose is tapered rapidly and a small maintenance dose is kept up for 6 to 8 weeks more. With correct and individualized dosage no systemic changes, such as menses change, altered libido, nausea, gynecomastia need be produced. A 1:25 milligram-per-Gram Premarin Cream® is excellent for maintenance.

Relapses occur in 10 per cent of the cases and are mild. They are easily brought under control with another short course of topical estrogens.

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7. Sulzberger, M. B. and Witten, V. H.: Hormones and Acne Vulgaris, Medical Clinics of North America 35:373 (1951)

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11. 1952 *Yearbook of Dermatology*, Year Book Publishers, Chicago, page 40 (1953)

12. Sawicky, H. H. *et al.*: Estrogen Cream Treatment of Acne. Arch. Derm. & Syphil. 68:17 (1953)

Usually only the face is involved and treated. The neighboring affected chest or back remains unchanged indicating a purely local effect. The acne process may appear in new untreated areas, another sign of local action only.

While no dietary regimen is observed patients are requested to obtain sufficient sleep and rest. Dental and other foci of infection must be eliminated.

Pre-menstrual flare-ups of acne occur for the first month or two subsiding gradually as the skin becomes drier and more feminine in texture and appearance. In this specially selected group it is impossible to see how rubbing 70 per cent alcohol into the skin can produce this result alone. If these remissions are due to systemic absorption no clinical effect is noticeable on libido, breasts, erections, menses—common locales for estrogen systemic effects.

The advantages of topical sodium estrone in acne are:

1. High local concentration of natural estrogens exerting direct effect.
2. Flexible dosage control, action reversed by withholding.
3. No effect on menses or breasts with correct dosage.
4. Acceptable to both sexes, unlike creams and tinted pastes.
5. Compatible with other measures: antibiotics, vaccines, local desquamating therapy.
6. Useful for stubborn patches, resistant to x-rays, etc.
7. Only target site is affected.
8. Estrogen is caught in inflammatory net.[13]
9. Small dose is effective.
10. Rapid effects in most cases.
11. Low cost.
12. Low sensitizing index.

The disadvantages of systemic estrogens are:

1. Low skin concentration.
2. Side effects are prominent, in males especially.
3. Pituitary, ovaries, uterus, breasts, testes are affected first.

13. Brunelli, B., Arch. Inter. de Pharm. 49:214, 1935: abstracted by Burrows, H.: *Biological Actions of Sex Steroids,* Cambridge University Press, page 307 (1949)

The indications for local estrogens in acne are:

1. Cystic scarring acne.
2. Both sexes are eligible.
3. Recurrent types—after roentgen therapy, vaccines, diets, vitamins.
4. Coarse textured, oily, muddy skin in both sexes.
5. Smaller indolent recurrent patches.

SUMMARY AND CONCLUSIONS

RECENT clinical and laboratory data confirm earlier reports that (1). Sodium estrone can produce a remission on one side of the face with no effect on the other side and no systemic effect in both sexes.[12] (2). Acne is physiologic at puberty and severe in individuals whose pilo-sebaceous apparatus over-reacts to otherwise normal estrogen-androgen blood levels.[1] Although oral estrogen therapy can produce many acne remissions, this approach is productive of a high degree of systemic reactions. Local, topically applied sodium estrone lotion and cream produces satisfactory remissions in severe chronic cystic x-ray relapsing acne. Using a plastic applicator the daily dose is reduced from 0.2 to 0.3 cubic centimeters.

This technic is rational, physiologic, etiologic and produces negligible side reactions. It has high patient acceptance and a low index of sensitivity.

This does not prevent local masking and peeling technics, draining cysts, expressing comedones, diets, vaccines, antibiotics, vitamins, alpine and ultraviolet rays.

Due attention must be given to dental infection, other foci of infection and other listed sources of aggravation and exacerbation of the process.

Eighty per cent of cases of chronic scarring acne vulgaris responded to topical estrogens in lotion and cream after treatment failures using other methods.

Flexibility and safety of the new approach to this stubborn disease is emphasized.

31 Lincoln Park

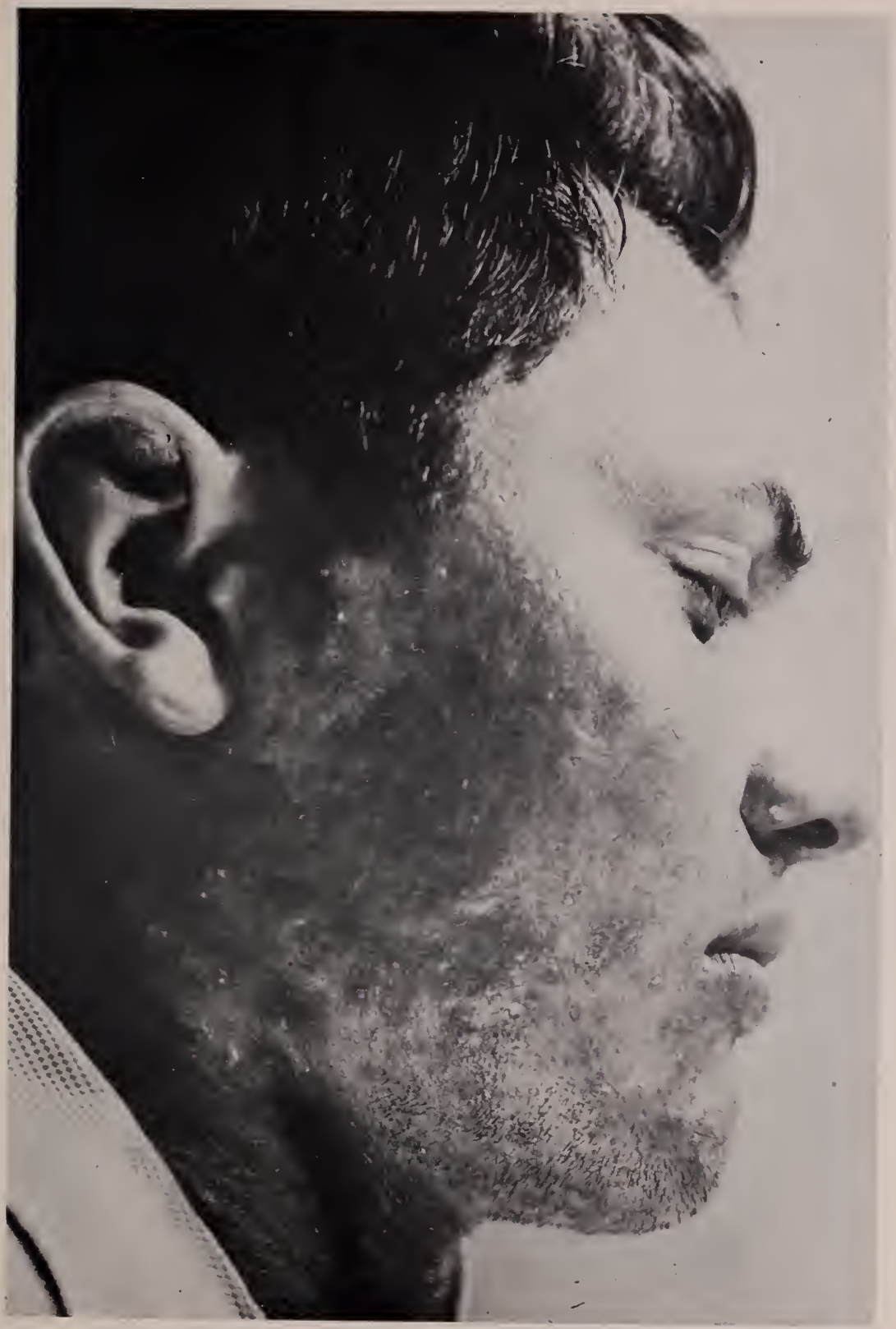

Figure 1. A. J. 18 years, severe cystic pustular facial, neck, shoulder acne of 5 years' duration. Relapses following diets, orthodox x-ray therapy, vitamins, vaccines.

Figure 2. Infection and cysts cleared after 4 months' topical estrogen lotion to face and neck. Severe scarring evident. Back unchanged. (Reproduced from Shapiro, I.: Topical Estrogens, Postgraduate Medicine June, 1954)

Figure 3. L. A. 19 years, chronic severe scarring acne for 5 years of face and back—previous treatment, vaccines, vitamins, alpine rays, x-ray therapy, diets, thyroid orally.

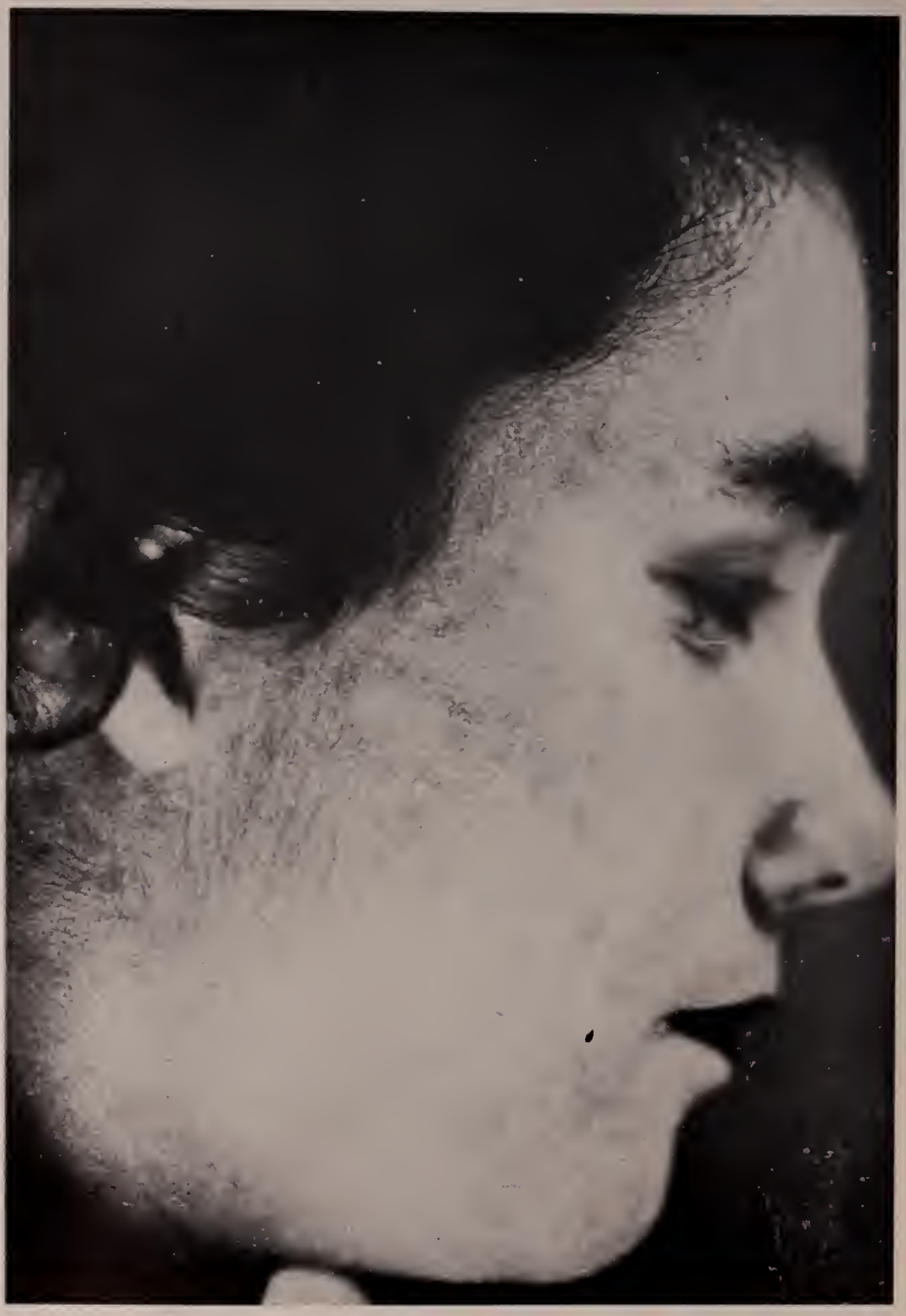

Figure 4. Face cleared after 10 weeks' topical estrogen lotion. Back unchanged. No other measures used, on full diet.

Figure 5. J.M., an 18-year old girl with disfiguring cystic keloidal acne of the face and back, of five years' duration, unaffected by diets, vaccines, alpine or roentgen rays.

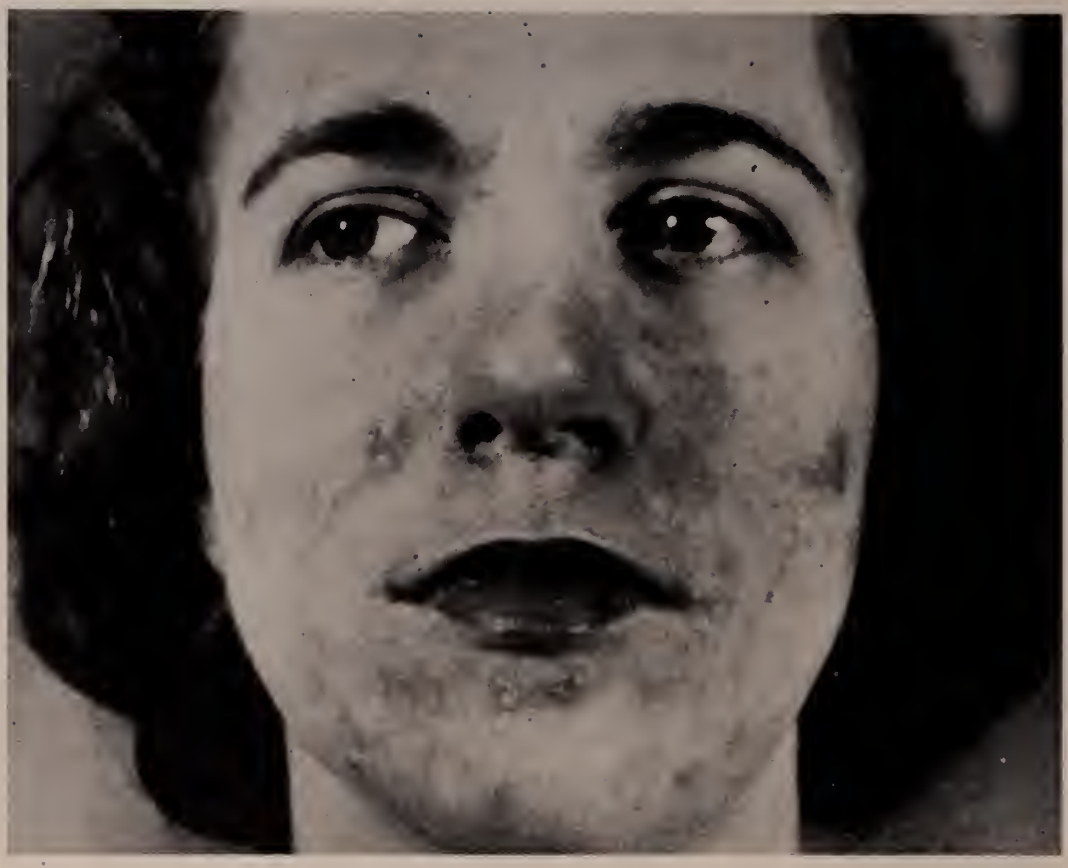

Figure 6. J. M. after 10 weeks of topical therapy with estrogen lotion. Remission was induced on the face but the back was unaffected. Oiliness decreased and the skin became softer, paler and of more feminine texture. (Reproduced from Shapiro, I.: Topical Estrogens: side actions. Journal Clinical Endo. 12:751 June 1952, Courtesy C. C. Thomas Co., Ill.)

Pain Associated with Acute Poliomyelitis

Analysis of 200 cases* of poliomyelitis with paralysis of extremities showed that the pain has both a neuralgic and myalgic element.

The character and distribution of the pain coincide with the symptoms in common root affections, such as herniated disc and acute polyradiculitis.

Poliomyelitis pain, it is accordingly asserted, generally has a radicular genesis, the neuralgic element being referable to the dorsal roots and the myalgic to the ventral roots.

The therapy is symptomatic; caffeine, and various local measures, such as hyperemia or anesthesia, as well as vibration massage, alleviate the myalgic pain.

For the treatment of acute painful muscle contractures, Bendz recommends the production of reactive hyperemia after brief arterial stasis by means of a blood pressure cuff. This, he says brings about immediate freedom from pain for muscle extension.

*Bendz, Philip: Am. J. Dis. Child. 88:141 (1954).

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Neurologic Complications in Obstetrics*

Dr. Flicker finds no evidence that chronic neurologic disorders are worsened by pregnancy. He discusses the development of various forms of neuritis (traumatic, infectious and deficiency) during pregnancy and the several neurologic syndromes produced by the intracranial lesions of eclampsia.

In this paper I deal with neurologic conditions which arise out of, or are aggravated by pregnancy, delivery, or postpartum sequelae. Only brief mention will be given to coincidental neurologic or psychiatric symptomatology.

TRAUMATIC NEURITIS

Injury to the peripheral nerves of the lower extremities is not uncommon, and constitutes the most frequent, if not the most important, neurologic complication. The most probable cause is direct pressure from the head of the baby, or from forceps. The condition usually follows prolonged, difficult delivery.[1]

Von Basedow[1a] first described the condition in 1838. In 1933, Beattie[1b] reported three cases in 8,000 deliveries. In 1935, Tillman[1c] cited nine cases in 18,800 deliveries. These figures were gleaned from the literature. When I personally examined 300 asymptomatic postpartum patients, I found by routine neurologic examination that 6 per cent of them had reflex or sensory changes in the lower extremities. This does not include three other patients seen during the same period of time for symptoms directly referable to the legs.

The involvement usually attacks the lumbosacral trunk, the sciatic nerve, or one of its branches. At the point where the trunk passes over the bony brim to enter the true pelvis,[3] it is particularly vulnerable.

The obturator and superior gluteal nerves lie just anterior to the lumbosacral trunk, and are also exposed to compression.

In most cases, no symptoms are reported until delivery. Sometimes, however, the patient complains of pains in the legs and numbness or weakness towards the termination of pregnancy. The pains are usually transient. Sensory and motor impairments are more persistent. We see loss of dorsiflexion of the foot (foot drop),weakness in movements of the toes, both flexion and extension, impairment of inversion and eversion of the ankle, sometimes impairment of the ankle jerk, hypesthesia of the lateral aspect of the foot and ankle, also sometimes the sole of the foot. Involvement of the superior gluteal nerve causes paralysis of abduction and weakness of internal rotation of the thigh. Obturator nerve involvement produces weakness of adduction and involvement of both internal and external rotation of the thigh.

Differential diagnosis must consider herniated disc and involvement of nerves by peri-

*Read at the Annual Meeting of The Medical Society of New Jersey, May 19, 1954.

pheral pressure paralyses occurring during anesthesia. This is discussed below. The clinical picture may vary from mild tingling in the extremity without motor weakness to permanent sensory and motor paralysis.

Lambrinudi [2] spoke of a rotation of the sacrum which he felt contributed to the development of the traumatic neuralgias.

PERIPHERAL NEURITIS

Peripheral neuritis may arise from a badly adjusted leg stirrup producing external peroneal paralysis by pressure on the nerve as it winds around the neck of the fibula with loss of dorsiflexion and eversion at the ankle, loss of ability to straighten and elevate the toes (claw foot and steppage gait). Mention might also be made of involvement of the nerves of the brachial plexus due to overabduction for transfusions during delivery.

Paralysis of the femoral nerve has been reported and attributed to overflexion of the thighs on the abdomen with adduction and outward rotation, causing pressure on the nerve by the iliopsoas muscle or Poupart's ligament. Severe sciatic pain before delivery is a warning signal, and paralysis may follow delivery.

Whenever a previous labor has been complicated by severe traumatic neuritis, cesarean section should be considered if it is felt that cephalopelvic disproportion was a factor. Rest in anatomic position, with molded plaster of paris posterior splint to control footdrop (which results from weakness of dorsiflexors), constitutes an important treatment technic. Massage and exercise are added as tolerated.

Generalized *polyneuritic* manifestations of non-traumatic origin were seen much more frequently in the past. It is now recognized that the polyneuritis associated with hyperemesis gravidarum is a dietary deficiency secondary to the vomiting and due to hypovitaminosis. Yet, etiologically, when polyneuritis is encountered, anemia, toxemia, uremia, must all be considered, as well as the more obvious starvation avitaminosis pattern. Polyneuritis has been reported following severe postpartum infection associated with septicemia. Criminal abortions have been mentioned in this regard.[4-7]

HERNIATED DISC

Herniated intervertebral disc may produce neuritis in pregnancy, usually compressing the adjacent posterior root. The most frequently involved are the two discs between the fourth lumbar and the first sacral vertebrae. The syndrome includes rigidity of the lumbar spine and spasm of the paravertebral musculature, loss of the normal lumbar lordosis, scoliosis, pain along the sciatic distribution, and diminution (or loss) of ankle or knee reflexes with sensory loss in the appropriate dermatomes.

Disc lesions may follow sudden violent activity in persons of usually sedentary habits. Many parturient women fall in this category. One author [8] referring to a corpus luteum hormone responsible for the relaxation of the pelvic joints in pregnancy, wonders if this might contribute towards herniated discs. I doubt it. In my personal experience, I can recall only two instances of herniated intervertebral disc associated with pregnancy.

ECLAMPSIA

Eclampsia manifests itself most dramatically in its neurologic signs. Its incidence varies in different parts of the world. Primiparas are more frequently affected than multiparas. The incidence is greatest in the last trimester of pregnancy and during delivery. Onset in the postpartum period is not common.

The premonitory phenomenae include headaches, albuminuria, edema, and moderate hypertension. Marked optic manifestations with amblyopia, retinal edema and detachment, may be seen before the convulsions appear. In other cases, seizures suddenly appear without any of these antecedents. After a series of convulsions, coma ensues. There often occur evidences of failing kidney function, oliguria, albuminuria or anuria.

Intercurrent cerebral hemorrhage may develop as a further complication. Death may occur in status epilepticus.

A unilateral dilated pupil, stiff neck (Kernig and Brudzinski signs), sudden hyperpyrexia, respiratory difficulties, with Cheyne-Stokes or Biot's breathing, suggest intracranial hemorrhage and a worsening prognosis.

Compression fractures and herniated discs can occur in the course of the convulsions.

In some patients, permanent sequelae such as aphasias, hemiplegias, hemianopsia,[3] and other evidences of cortical and brain stem involvement have been reported.[3a]

Most patients recover without sequelae, but 5 to 10 per cent of them die.

Hypertensive vascular disease is differentiated somewhat dubiously from eclampsia. In most cases the hypertension antedates the pregnancy and is not affected by it. Less commonly, hypertensive encephalopathy develops, and, rarely, malignant necrotizing endarteritis.

Neurologic examination reveals headaches, papilledema, visual changes, retinal hemorrhages, retinal edema or detachment, transient palsies, hemiplegia, monoplegia, hemianopsia, aphasia. Convulsions usually bespeak hemorrhage.

INTRACRANIAL VASCULAR LESIONS

INTRACRANIAL venous thromboses occur in the puerperium, rather rarely, but are devastating when they happen. Four to 21 days after a normal pregnancy and delivery, headaches may develop with convulsions and then paralysis. Papilledema will depend on the degree of sinus thrombosis. The cause is unknown. One ingenious theory holds that emboli from the pelvic veins pass by way of the valveless vertebral veins to the brain. Another theory is that they arise *in situ* due to local vessel damage caused by increased venous pressure with the straining of labor.

Anticoagulant therapy should be considered[9] if thrombophlebitis develops in legs or if the cerebral pathology extends.

Brain hemorrhage is found in 15 to 20 per cent of autopsies on patients who died of eclampsia. However, all pregnant women who die of brain hemorrhage or softening, do *not* have eclampsia. Hypertension, albuminuria, edema, and convulsions in pregnancy do not necessarily result from eclampsia.[10]

Hemorrhage and "softening of the brain" may also be the result of hypertension, arteriosclerosis, syphilis, or congenital aneurism.[11] In the absence of such chronic vascular disease, spasm may be the productive agent of distal softening and encephalomalacia.[12]

Occasionally, following loss of considerable blood, the patient will reveal the symptomatic pattern of cerebral hemorrhage, yet, replacement of the blood by transfusion may completely clear up the signs. The pathology postulated in these patients is a relative deficiency of the vascular tree on one side of the cerebrum, with, perhaps, a spasm due to the relative anemia.

Some neurologists believe that toxemias of pregnancy[8] can cause encephalomalacia. They ascribe the encephalomalacia to spasm and occlusion.

COINCIDENTAL NEUROLOGIC SYNDROMES

ONE looks in vain for undisputed evidence that pregnancy worsens many other basic neurologic conditions. Authors differ on the effects of pregnancy on multiple sclerosis,[14] myasthenia gravis,[14] and others. There appears to be some agreement that the downhill course of postencephalitic parkinsonism is hastened, and that Huntington's Chorea may show its first manifestations during pregnancy.

I have found no evidence that interruption of pregnancy will relieve, alleviate, or retard most of the neurologic states. Once they start, they seem to be handled as well by the woman who remains pregnant as by one whose pregnancy is terminated. Sometimes, indeed, interruption of pregnancy will worsen the neuropathologic process.

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DISCUSSION OF DR. FLICKER'S PAPER

S. A. Cosgrove, M.D., Jersey City: Dr. Flicker says that the neurologic complications with which he deals are relatively infrequent. But his discussion impresses me as indicating the probability that, while clear to a trained neurologist, most of them are overlooked by the general practitioner and the obstetrician. Much of the symptomatology, which he describes is perfectly familiar to anyone who treats obstetric patients. But we fail to recognize the real neurologic identity of most of them. For instance, I have repeatedly observed, during delivery, especially with forceps, single sharp, jerky extension of the flexed leg even in anesthetized patients. I have recognized this as due to mechanical trauma, probably to the lumbosacral trunk. But I have not connected it with sequelae which I have recognized by any later symptomatic pattern and have not had sense or knowledge enough to follow by the painstaking examination which Dr. Flicker has used, whereby he recognized such sequelae in 6 per cent of a large series. Certainly his observations in reference to peripheral neuritis deserve recognition by the obstetrician, practitioner and specialist alike. Thus the traumatic factors which he details may be minimized, and late result of careless handling be reduced.

Improvements in understanding of dietary and vitamin requirements, and the availability of means to meet these requirements by parenteral technics, have made severe cases of polyneuritis extremely rare in modern experience in average American communities.

Dr. Flicker's description of those neurologic manifestations which may be seen in eclampsia are accurate enough. His statement that its "therapy taxes the ability of the most competent obstetricians" is also strictly accurate, if a trifle ungenerous. For here the "competent obstetrician" recognizes the identity of eclampsia, and its neurologic manifestations, as a late terminal phase of a much broader disease, encompassed in the more inclusive term toxemia of pregnancy.

He regards it as a medical man might regard perforated ulcer in typhoid fever, or as a surgeon might general peritonitis in appendicitis. Certainly he has within his ability the treatment of toxemia of pregnancy in such manner as to *prevent eclampsia in nearly all cases,* just as the careful medical man might hope to prevent perforated typhoid ulcer, or the surgeon, by early recognition and operation, to prevent appendiceal peritonitis.

The same thing is, to some extent, true of the most serious results of even severe antecedent hypertensive vascular disease. We do try to differentiate between this condition and pregnancy toxemia. But as Dr. Flicker says, this differentiation is difficult, especially as the latter may be superimposed on the former. The attempt should be made, however, as its success may modify management. Recent communications stress the differences in eyeground changes as most significant in the differential diagnosis.

The several other specific neurologic entities covered in this review are exceedingly rare, as is the "Sheehan's syndrome" due to pituitary degener-

ation, which generally follows massive hemorrhage and which has greatly interested obstetricians. The short limit of this discussion does not permit reference to them.

Particularly gratifying are Dr. Flicker's remarks on coincidental neurologic syndromes. He says, "One looks in vain for undisputed evidence that pregnancy worsens many other basic neurologic conditions." This of course is not strange inasmuch as such conditions, as for instance multiple sclerosis, present such a variation of pattern in their natural history apart from pregnancy. It thus becomes almost impossible to establish causal relations between pregnancy and those natural fluctuations of the nervous system diseases. It serves to very definitely explain why the psychosomatic bad results so often attending unnatural interruption of pregnancy will frequently worsen the neuropathologic processes concerned.

I thank Dr. Flicker for an excellent effort to excite the interest of all of us in these somewhat negelected common problems.

Vaccination Against Accidents

About 13,000 children are killed each year, and 50,000 permanently injured by accidents. Accidents cause more deaths of youngsters than the next six most important causes combined. But Harry F. Dietrich, said that accidents—like diseases—can be prevented and treated with the right vaccine.

The vaccine consists of protection and education before the child starts school, Dr. Dietrich said in the November 6 Journal of the American Medical Association. It must be given at the preschool age because that is when a child's behavior and personality are shaped and it is also when one-half of all fatal accidents occur, he said.

"Up to the age of 12 to 18 months the infant needs complete protection from all accident hazards. If he is burned, drowned, crushed, poisoned, or mangled he has been denied that protection," Dr. Dietrich said. ". . . consider the child's situation at age 5 or 6 when school and play take him away from the protective devices of the home. His safety now depends on what he has learned. Whether or not he dashes blindly into the street, stumbles into a water-filled quarry, ignites a pile of rubbish, loses his arm in some power machinery, or drinks from a bottle filled with paint thinner, depends on what his parents taught him between the ages of 1 and 5.

"It must be apparent that after the age of one, protection must gradually be reduced and replaced by education. While still maintaining protection against subtle and incomprehensible hazards, parents must begin to teach the child to do safely all of the things he wants to do and is capable of doing.

"Protection is primarily intended to keep the child unharmed until he is able to be taught," he said. Children must learn to live safely "with, rather than without" such things as fire, machinery, electricity, and chemicals. The appliction of accident prevention in the home requires three tools: "forethought, time, and discipline."

In addition to home protection and education, Dr. Dietrich suggested improvements in adult education, accident prevention courses in medical schools, legislation, improvements in packaging and labeling insect poisons and medicines, and possible control of inflammability of children's clothing. But he said "even brief consideration of the motor vehicle accident situation will keep us from placing too great dependence on laws." The problem must be solved instead by the medical profession and parents, because of "the devasting toll that accidents are exacting each year."

Robert Brill, M.D.
Passaic

The Hospital Tissue Committee:* Its Organization and Effectiveness

If the pioneer program of this hospital is any criterion, there appears to be nothing like a Tissue Committee for reducing "unnecessary surgery." How to organize such a committee is told concisely in this paper.

The Joint Commission on Hospital Accreditation has ruled that every fully approved hospital should have a Tissue Committee or a Surgical Audit Committee. Many different types of committees have been organized. In some instances these are too small: for example,[1] a committee consisting only of the chiefs of surgical, gynecologic and laboratory services. Sometimes the Committee labors under the delusion that its only mission is to compare the pathologist's report with the surgeon's pre-operative diagnosis, for approval or censure.[2] This fallacious concept puts too much importance in the laboratory and gives the pathologist more responsibility than he should have. Pathologic reports are only *one* part of the chart. No case should be criticized until all the facts have been objectively reviewed by an impartial group.

Our experience has shown that a proper review of the surgery in any institution of over 200 beds, is a formidable undertaking. If the Committee is large enough, the work load for each committee member becomes easier. The committee must not be so large as to be unwieldy. We have found that seven men were not too many for efficiency. During the past year, we have added an eighth member without slowing down our procedure.

At St. Mary's Hospital in Passaic, the Committee includes an internist, an obstetrician, an orthopedist, four general surgeons and the pathologist. The internist rotates. The "attending" on internal medicine for that month sits on the Committee. The other members are more or less permanent. All doctors on our staff as well as professional visitors from other hospitals are welcome to attend meetings of the Tissue Committee. However, the bulk of the Committee's work is actually done prior to the monthly meeting.

First, cases to be reviewed must be selected. The operating room supervisor gives many hours of her time in listing the cases. The categories which she selects for review are those reported in our previous article.[3] From her operating room files, she can list all reproductive surgery, all appendectomies, all discrepancies between pre-operative and post-

*Read May 17, 1954, at the Annual Meeting of The Medical Society of New Jersey. Dr. Brill is Director of Laboratories, St. Mary's Hospital, Passaic, New Jersey.

1. Personal Communication during joint meeting of College of American Pathologists and American Society of Clinical Pathologists, Chicago, Oct. 1953.

2. Rabson, S. M.: "Why Pick on the Surgeons?" Modern Hospital, 82:57 (Feb. 1954)

3. Weinert, H. V., and Brill, R.: "Effectiveness of Hospital Tissue Committee in Raising Surgical Standards," J.A.M.A. 150:992 (Nov. 8, 1952)

operative diagnoses. Every emergency admission which goes to the operating room is entered in the operating room ledger in red ink. These can easily be listed for review.

In the early years, the operating room supervisor's list was taken by the chairman to the record room. Here, the charts of listed cases were assembled by the librarian's staff. Also available in the record room was the pathologist's file on specimens with minimal or absent pathology for that month. Often, the pathologist's selections would duplicate appendectomy or hysterectomy charts listed by the operating room supervisor. However, the pathologist might include a cholecystectomy, mastectomy, thyroidectomy or gastrectomy case, which would not have been reviewed but for the pathologist's listing.

After charts are assembled by categories, they are assigned by the chairman to the several members of the committee. Before making them available for review, each committeeman's assigned charts are checked to be sure he is not reviewing his own cases or those of his immediate associates. Included with this group of charts is a note, specifying for careful scrutiny those cases which had been questioned by the pathologist.

This assigning of charts entails about three hours' work. For this reason, and because the chairman now has additional duties as Chief of Surgery, it was decided to rotate the position of chairman each month. Thus every permanent member of the committee learns to "pull the charts" and assign them for a monthly meeting. A week before the monthly meeting announcements are sent out, informing each member that his assigned charts are ready for review. Each committeeman must do a careful evaluation of his assigned cases *prior* to the meeting; otherwise he will hold up the other seven men at the time of our evening session. Notes about each chart are brought to the meeting.

At the time of the session, each committee member presents his assigned cases by chart number only. The names of the physicians associated with the case are not mentioned. Cases obviously requiring surgery are quickly reviewed. This would be true of such cases as appendectomy for suppurative appendicitis, salpingectomy for ruptured ectopic gestation and the like. However, cases which have been less well handled, are presented concisely and discussed thoroughly before a decision is reached. The decision might confirm the need for operative intervention or might criticize the deficiencies present. The criticism is noted in writing next to the chart number, with an accompanying comment that the censure is applied to the referring doctor or surgeon or consultant, or to two or three of them, depending on the facts. Subsequently, these comments are transcribed to the file of each physician criticized.

Appendectomies were found to be a hard group of cases to appraise. On one hand was the history and physical examination typical of appendicitis; on the other hand, a relatively normal blood count and a histologically normal appendix. To criticize this did not seem fair to the surgeon, unless there was a glaring oversight, such as hematuria, pointing to renal rather than appendiceal colic. For that reason, all appendectomies are listed in the files of the operating surgeon and also of the referring physician if there was one. These are listed by chart number, pre-operative diagnosis, pathological diagnosis, whether the case was an emergency and comments (if the case had been criticized by the committee).

At the time of the committee's report to the staff, it is simple to pick out those surgeons whose patients showed a higher proportion of histologically normal appendices than the average for the staff.

ONE important function of the St. Mary's Hospital Tissue Committee is to see that the rules of the Surgical Control Committee are complied with.[4] Thus, the criticisms listed for possible disciplinary action, in the files of some physician might include such comments as:

4. Weinert, H. V.: Paper presented at Public Relations Conference, American Medical Association Meeting, St. Louis, Nov. 30, 1953.

"No documentation of cephalo-pelvic disproportion on the chart. Yet that is the indication for the cesarean section."

"No report on the chart from the radiologist, confirming the presence of stones, for which the cholecystectomy was performed. No stones were found in the specimen."

"The consultant, approving the need for hysterectomy, is not qualified to give this approval."

The nation-wide interest in the original report of the work of the St. Mary's Hospital Tissue Committee was evidenced by requests from nearly 400 physicians and institutions, many requesting from 10 to 100 reprints, as well as copies of the *Rules of the Surgical Control Committee*. That report covered the first 16 months of work. It showed marked improvement in the proportion of criticized emergency surgery and reproductive surgery, but little improvement in appendectomies. Now, after more than four years, and without any drastic action, without removal of any physician from the staff, there is further improvement as evidenced by similar statistics over a comparable three month period. Figures 1 and 2)

The fact charts are being reviewed carefully is sufficient to bring about improvement in any institution where such a systematic review had not previously been undertaken.

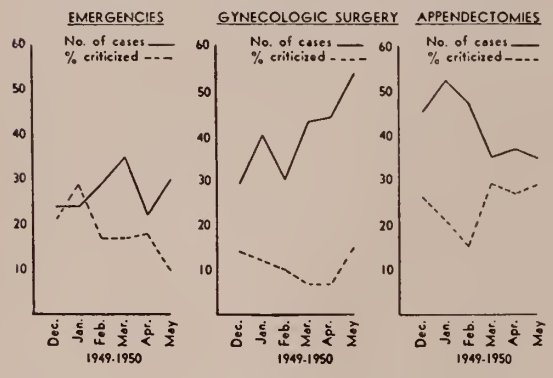

Figure 1. Relation between total number of surgical cases and percentage censured during first six months of tissue committee's operation.

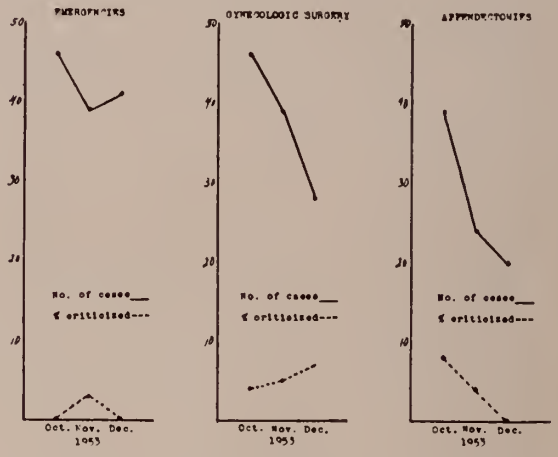

Figure 2. Comparison between the total number of operated cases, in certain categories, and the percentage of each criticized as "unnecessary surgery."

St. Mary's Hospital

Examinations Could Reduce Blindness

Eye tests for all children about their third birthday and regular examinations for older persons are "the only hope" of preventing the two greatest causes of blindness in the U.S., according to Dr. Trygve Gundersen. Dr. Gundersen points out that early detection is essential in reducing cases of glaucoma and amblyopia ex anopsia. An estimated 1,130,000 persons have unrecognized glaucoma and more than a million are blind in one eye from disuse. How many of the glaucoma patients may become totally blind cannot be estimated, but the number must be high. Many of the disuse patients live with no great handicap — but would be completely sightless if injury or disease blinded their one good eye. Both amblyopia ex anopsia and glaucoma are preventable to a large degree, he said, and the problem is primarily one of detection. Dr. Gundersen suggested eye tests for children just before the age of three, at which time amblyopia can be diagnosed and treated, and eye tests as part of routine physical examinations among persons over 30, the most frequent sufferers from glaucoma.

—Journal of the American Medical Association, Nov. 6, 1954.

Robert E. Green, M.D.
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Common Nerve Injuries of the Upper Extremities*

Practical pointers on the management of upper extremity nerve injuries feature this up-to-date review by Dr. Green.

Injuries to the major nerves of the upper extremity result from lacerations, crushing, pressure, stretching, neighborhood bleeding and other causes. Even forceful contraction of muscles may damage a nerve. Sudden, vigorous upward stretching of the arms (as in reaching upward to keep from falling) may tear cords of the brachial plexus. Prolonged and repeated mild trauma may affect a nerve. Thus, a delayed ulnar paralysis may result from repeated stretching of the ulnar nerve over the medical condyle of the humerus, following a fracture of the lower end of the humerus where the carrying angle of the elbow has been disturbed.

In any consideration of nerve injuries, the anatomy is always of primary importance.

MEDIAN NERVE

The median nerve originates from the medial and lateral cords of the brachial plexus, and nerve roots C6, 7, 8 and T1. It descends in the medial portion of the arm along with the brachial artery and ulnar nerve. It enters the forearm beneath the pronator teres muscle, and runs beneath the flexor digitorum sublimis. At the wrist it is more superficial and lies lateral to the tendon of the palmaris longus.

Action: It is the motor nerve for flexion of the first 3 fingers and for flexion and opposition of the thumb. Its sensory supply is to the palmar surface of the first 3 fingers. Median nerve paralysis results in a flat palm with loss of opposition of the thumb (apehand).

Characteristic Symptoms: A lesion above the elbow leads to paralysis and atrophy of the pronators. This results in the forearm being maintained in midposition. To compensate for a lack of pronation, it is necessary to abduct the flexed elbow, or (if the elbow is extended), to rotate inwardly the whole arm at the shoulder.

Only a partial loss of wrist flexion results from paralysis of the brachioradialis. This is because the flexor carpi ulnaris, supplied by the ulnar nerve, produces some of the function. Paralysis of the flexor digitorum sublimis and the flexor digitorum profundus (radial portion) produces a loss of ability to flex the middle phalanx of all fingers and the terminal phalanx of the index, middle finger, and thumb.

The index finger and thumb are the only fingers that lose all flexion in median nerve paralysis. This occurs because the first phalanx of each finger is flexed by interossei; the terminal phalanx of the 4th and 5th fingers by deep flexors, and both of these groups are supplied by the ulnar nerve. Flexion of the middle finger is accomplished either by innervation of the deep flexors by the ulnar, or through the aponeurotic attachment to the 2nd and 3rd fingers. Paralysis of the muscles of

*Read May 19, 1954, at the Annual Meeting, The Medical Society of New Jersey.

the thenar eminence produces atrophy and loss of the ability to abduct the thumb as well as loss of the ability to accurately oppose the thumb to the tips of the other fingers. There is loss of ability to make a tight fist.

Sensory loss in median nerve paralysis consists mainly in anesthesia over the palmar surface of the thumb and the next 2½ fingers.

Of all nerve injuries in the arm, the median most frequently produces causalgia.

ULNAR NERVE

Derived from the medial cord of the brachial plexus, the ulnar nerve originates from roots C8 and T1. It lies along the medial surface of the arm between the biceps and triceps. It passes over the ulnar notch at the elbow, pierces the flexor carpi ulnaris muscle, and lies beneath the muscle on the radial surface of the forearm.

Signs of Paralysis: It supplies most of the intrinsic muscles of the hand, so that severe wasting is noted. This is produced by atrophy of the interossei, the thenar and hypothenar muscles. Unopposed contraction of the flexors of the fingers (median nerve) results in the claw hand deformity. The sensory supply is to the palmar surface of the little finger and the ulnar surface of the 4th finger.

RADIAL NERVE

The radial nerve is a direct continuation of the posterior cord of the brachial plexus. Its fibers are derived from C6, 7, 8 and T1. It accompanies the profunda artery around and behind the humerus and in the radial groove. It courses down beneath the upper portion of the brachioradialis muscle lateral to the cubital space where it divides into deep (dorsal interosseus) and superficial (cutaneous) and muscular branches.

Action: It is the motor nerve for extension (dorsiflexion) of the wrist and fingers. In paralysis of the radial nerve, there is wrist drop. Sensory loss is over a variable area on the dorsum of the hand.

Level of Lesion and Characteristic Symptoms: (1) If the lesion is at the level of the axilla (particularly observed in war wounds) the entire nerve is involved, including paralysis of the triceps muscle. If (2) it is in the middle third of the arm, by fractures of the humerus: (A) the triceps remains normal and (B) paralysis of the extensor supinator group and all extensors below it produces a wrist drop. If (3) the lesion is in the middle third of the forearm, paralysis of the deep radial nerve gives isolated paralysis of extensors of the thumb and index finger.

AXILLARY NERVE

The axillary nerve is derived from the posterior cord of the brachial plexus and C5 and 6. It lies behind the axillary artery. After leaving the axilla, it winds around the surgical neck of the humerus along with the posterior humeral circumflex artery, through the quadrilateral space, and divides into small superior and larger inferior branch. It supplies the deltoid and teres minor muscles. Injury, therefore, results in inability to raise the arm outward, forward and backward. The deltoid is visibly atrophied. The entire shoulder joint can be seen and palpated. Sensory supply is to the skin over the deltoid.

MUSCULO-CUTANEOUS NERVE

The musculo-cutaneous nerve arises from the lateral cord of the brachial plexus. Its fibers are derived from C5 and C6. It lies lateral to the axillary artery, adjacent to the median nerve and brachial artery. It pierces the coracobrachialis muscle and becomes subcutaneous near the bend of the elbow, where it continues as the medial antibrachial cutaneous nerve.

Action: This is the muscular supply to the biceps, brachialis and coracobrachialis. Paralysis leads to inability to flex the elbow. Weak flexion may still be possible when the forearm is pronated by action of the brachioradialis (radial nerve).

The sensory supply is to the anterolateral surface of the forearm from the elbow to the wrist.

REMAINDER OF PLEXUS

THE remainder of the nerves derived from the brachial plexus are not truly in the upper extremity, and will not be considered in this paper.

THE PHYSIOLOGY OF NERVE REPAIR

WHEN a peripheral nerve is severed, the portion of the axon distal to the cell body undergoes degeneration. This begins with swelling in the myelin sheaths, visible after several days. Gradually the myelin breaks up into fragments. The axons, meanwhile, become swollen and break up. This process does not proceed distally from the cut end, but develops simultaneously throughout the peripheral fiber.

In the proximal stump, there also appears the same processes of degeneration. These extend all the way back to the cell body, with demonstrable changes of the Nissl substance in the cell body. These changes, however, reverse themselves in about a week. Recovery of this portion of the nerve then ensues. But in the distal portion, there is no recovery. Functional recovery can occur only when the fibrils of the proximal nerve grow through the distal stump.

Regeneration of the peripheral nerve has been shown by Young [1] to take place in the following manner. When the cut ends of a peripheral nerve are approximated, it takes one week for the growing ends to cross the gap. Following this, the nerve grows at the rate of approximately four millimeters a day. When the growing nerve reaches the motor end plate another week must elapse before the muscle is reinnervated.

SURGICAL PRINCIPLES

THE incision for approach to a peripheral nerve will frequently, of necessity, be long, and will cross a joint. When this is necessary, it must always be planned so that it does not cross the flexion crease at right angles. Instead, the incision is made in two longitudinal limbs above and below the joint with a transverse connection paralleling flexion creases at the joint. This will prevent skin and subcutaneous contraction deformities which would otherwise occur. Such deformities are unsightly and limit motion at the joint.

Time for Nerve Repair: For many years, including the period through World War II, a great debate continued as to whether nerve suture should be performed immediately after the injury, or whether it should be delayed several weeks. Proponents of delay were motivated not by technical surgical difficulties attending early repair, but rather by the physiologic observation that it takes at least two weeks for degeneration of the distal stump to be complete. The hope was that the growing proximal end could find a better channel through a more or less hollow tube in which the fibrils had degenerated rather than one in which the fibrils were still present, which might obstruct the regenerating nerve.

However, the work of Scarff [2] and of Spurling [3] indicates that best results are obtained by the earliest possible suture, in spite of any theoretical reasoning to the contrary. My personal experience at Cushing General Hospital, where large numbers of peripheral nerve injuries were operated upon at various times after injury, would support this.

Clean wounds in which nerve injury is present are therefore repaired immediately. Primary skin closure is performed. If the wound is contaminated or infected, if it is necessary to pack the wound, or insert a drain, the nerve should be approximated with a few sutures to prevent additional retraction of nerve ends. This also makes it easier to find them at secondary operations. Spurling [3] says that mildly infected wounds may be closed by secondary suture as soon as a granulating surface is reasonably clean, and that nerve repair may be attempted within three weeks after secondary closure, if infection has subsided. Davis [4] has shown that peripheral nerve is more resistant to infection than are the muscles,

1. Young, S. Z.: Physiologic Review, 22:318 (1942)
2. Scarff, J. E.: Surgery, Gynecology and Obstetrics, 81:405 (1945)
3. Spurling, R. G.: Journal of Neurosurgery, 1:133 (1944)

tendons, fat, or fasciae, and that nerve healing[5] will result, in most instances, even when wound infection is present.

Technic of Resection and Sutures: The presently used methods date to the period of World War I, when neuromata and scars first began to be resected by thin slices until normal nerve tissue was reached. Internal neurolysis (injection of saline into a scarred nerve in an effort to free the fibre bundles) also originated at that time.

The nerve suture itself has been done with catgut, silk, cotton, tantalum wire and the sutureless plasma clot method devised in 1932, and later popularized by Tarlov.[6] The latter method never gained widespread use because of the technical difficulties and because of the inability of the clot to withstand much tension. Cuffs of tantalum foil and similar materials which enjoyed a brief period of popularity, are no longer favored because they prevent the nerve sheath from coming in contact with adjacent viable tissue and tissue juices.

Davis[5] has stated: "The ideal surgical method of repairing a peripheral nerve injury is end-to-end apposition of the divided ends at the earliest possible moment following division with the finest possible suture material which passes through the epineurium of the nerve trunk."

In bringing several nerve trunks into apposition frequently a large gap will be found. Methods of overcoming such gaps were described by Babcock[7] and Naffziger.[8]

1. Two to three centimeters in length may be obtained in any of the long nerves by adequate exposure and by properly freeing the nerve.

2. (A)—Flexion of the wrist gives four centimeters to the median and ulnar nerves.

2. (B)—Elevation of the shoulder gives seven centimeters of slack to the radial nerve.

2. (C)—Rotation of the head to the opposite side gives one to two centimeters of slack to roots of the brachial plexus.

3. Bulb suture and stretching—2 or 3 stage operations.

4. Transplanting or rerouting of nerves (especially applicable to median and ulnar nerves at the elbow).

In dealing with a non-functioning nerve where anatomic continuity is present, electrical stimulation is of great value in determining whether physiologic continuity exists.

Post-Operative Care: Following a nerve suture, it is essential to maintain joint mobility while the nerve is growing. Instead of depending upon a short physiotherapy session (although this is certainly useful) I urge the patient himself to move the paralyzed extremity through its range of movement for several hours a day. Unless tight splinting is required for a fracture, I avoid rigid immobilization of a normal joint.

How about electrical stimulation of affected muscles during the convalescent period? Experience at Cushing General Hospital would seem to indicate that it is of little value.

CAUSALGIA

BRIEF mention must be made of causalgia.

This condition is common in peripheral nerve injuries of the arm. Because of the severity of the pain, narcotic addiction can develop. Treatment should be undertaken early to avoid this. A local lesion along the course of the nerve, such as a scar, should be searched for. If Novocaine®,* injected into the proximal end of the nerve will temporarily stop the pain, resection of the scar will frequently cure the condition. Seletz[9] has reported 15 such cases. In other cases, repeated sympathetic blocks with procaine or surgical sympathectomy are of value. White[10] emphasized that the sympathectomy should be performed before the local exploration of the nerve.

153 Irvington Avenue

4. Davis, L., Perret, G., and Hiller, F.: Surgery, Gynecology and Obstetrics, 81:302 (1945)

5. Davis, L.: Surgery, Gynecology and Obstetrics, 80:444 (1944)

6. Tarlov, I. M.: Surgery, 15:257 (1944)

7. Babcock, W. W.: Surgery, Gynecology and Obstetrics, 45:368 (1927)

8. Naffziger, H. C.: Surgery, Gynecology and Obstetrics, 32:193 (1921)

9. Seletz, E.: *Surgery of Peripheral Nerves.* Springfield, Illinois, 1951. C. C. Thomas, page 28

10. White, J. C., Smithwick, R. H. and Simeone, A. F.: *The Autonomic Nervous System.* New York City 1952, Macmillan, page 223

*Novocaine is the registered tradename for the Winthrop-Stearns brand of Procaine.

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Do We Need Institutions for Epileptics?*

For more than half a century, New Jersey has had a "Village for Epileptics" tucked away between Princeton and Hopewell. It was decided to convert the facilities into a diagnostic, therapeutic and research center for psychiatric and neurologic problems in New Jersey State institutions. To do this the 1250 presumptive epileptics were reviewed and reclassified. Some startling results of this analysis are reflected in this paper.

The discovery of new anti-convulsant drugs, supplanting the bromides and enhancing the action of the barbiturates, allowed for a much better control of seizures in epileptics, thus abrogating the necessity of special state institutions for epileptics. In conformity with this present medical knowledge on the handling of epileptics, a plan was presented and acted upon by the State Board of Control of the Department of Institutions and Agencies calling for abandonment of the New Jersey State Village for Epileptics and reconverting its resources into a diagnostic, active treatment, training and research center for psychiatric and neurologic disorders.

In September 1952, a new administration was appointed for "Skillman" in order that the conversion might take place. Immediately confronting the new administration was the problem of the population in residence at that time. For this reason, the entire population of 1250 patients had to be restudied and classified by the staff in accordance with the Diagnostic and Statistical Manual of the American Psychiatric Association.

It was decided that the primary disorder should be treated in state institutions best equipped to handle these disorders and that the treatment of convulsions *per se* should be secondary. Psychotic patients were to be transferred to mental hospitals for more effective treatment of their psychoses. Mental defectives would move to the appropriate state schools. Those remaining epileptics with no mental disorder or with any other disorder; *i.e.*, personality disorder, psychoneuroses, and so forth, would be prepared for community placement with their family, in nursing homes, in employment, old age assistance or hospital family care.

It was recognized initially that the long institutionalization of many of these patients required considerable preparation for placement of these patients in the community. Therefore, many patients suitable for community placement were started on group therapy to prepare them for their role in the community. It was felt that the uncomplicated epileptic could best adjust within the community. Convulsions could be readily controlled through use of the newer drugs by the local physicians. It was also realized that some few uncomplicated epileptics would still have to be institutional-

*This paper is from the N. J. Neuro-Psychiatric Institute, Princeton, N. J. It was read on May 19, 1954, at the Annual Meeting of The Medical Society of New Jersey.

ized for thorough study and "an anti-convulsant regime" prior to an early return to the community.

In October 1952, a reclassification of the entire patient population was begun with two simultaneous daily diagnostic staffs being held by the Assistant Superintendent and Clinical Director. This reclassification has now been completed. The New Jersey Neuro-Psychiatric Institute is probably the first and only state hospital in the world in which the entire population is classified according to the criteria of the new American Psychiatric Association Diagnostic Manual.

The results of this classification are shown in the tables below.

Some of the cases found during the reclassification were rather unusual. In the past, anyone having a seizure from any cause whatsoever was likely to be sent to the State Village for Epileptics. Several children, juvenile diabetics who had convulsions as a result of this disease, were committed as epileptics. One woman who had eclampsia and one resultant convulsion was committed as an epileptic. One man was admitted in 1906 and throughout his entire hospitalization had never had a convulsion. He was not mentally defective nor psychotic. One woman was admitted in 1905 who had never had a seizure and, while it is true that at the time of reclassification she showed some simple senile deteriorative changes in her personality make-up, she cannot be considered as epileptic, overtly psychotic or mentally defective. We felt that she was entitled to her senile condition after her long residence in a custodial institutional environment.

TABLE 1 shows the reclassified male patients (a total of 565) with age group divided into the four categories (psychotic, mental defective, no mental disorder, and others). There are more psychotic patients than that of any other classification. Psychotics appear more prevalent in the 35 to 50 age group. On the other hand, the mental defectives are greater in the "under 25" age group than in any other life period. This is probably due, as far as mental defectives are concerned, to the fact that many of these patients are severe brain damage cases due to birth injury or intercurrent cerebral infection and the mortality rate in this group is high.

TABLE 1. AGE AND DIAGNOSIS—MALES

Males	Under 25	25-35	35-50	Over 50
Psychotic	42	36	101	52
Mental Defective	94	41	53	19
No Mental Disorder	9	3	3	8
Other	10	17	27	50

In the female group (Table 2), the greatest number of psychotics is in the "over 50" age group. The 35 to 50 age also contains a large number of psychotics. The female group differs from the male in this respect. In the mentally defectives females as among the males, the largest proportion are in the "under 25" age group.

TABLE 2. AGE AND DIAGNOSIS—FEMALES

Females	Under 25	25-35	35-50	Over 50
Psychotic	33	58	127	163
Mental Defective	85	49	37	13
No Mental Disorder	5	11	15	35
Other	9	12	18	22

Table 3 represents the total number of males correlated with length of hospital stay. In general, the longer the hospital stay, the greater the number of psychotic patients. Thus male patients who have been in residence over ten years far outnumber those with hospital residence of under ten years. The long stay for mentally defectives can probably be explained by the fact that these patients, although their mortality rate is high, remain in the hospital without release, thus increasing the numbers with long hospital stay.

TABLE 3—LENGTH OF HOSPITAL STAY—IN YEARS: MALES

Male	Under 5	5-10	10-20	Over 20
Psychotic	32	30	79	90
Mental Defective	30	58	47	63
No Mental Disorder	8	3	5	7
Other	20	19	33	32

For females Table 4 shows that the longer the stay the greater the number of psychotic patients. There is a marked rise after ten years of hospital stay in the number of psychotic

females as shown by this table. In the female group, the mentally defectives are rather evenly divided into the different lengths of hospital stay.

TABLE 4. YEARS OF HOSPITAL STAY OF FEMALE PATIENTS

Female	Under 5	5-10	10-20	Over 20
Psychotic	25	48	133	176
Mental Defective	35	50	52	47
No Mental Disorder	9	9	24	24
Other	8	10	20	23

TABLE 5 shows the total number of patients reclassified (1258) divided into male, female, total, and classified as to psychotic, mentally defective, no mental disorder, and others. This shows the greater preponderance of psychotic patients over the other types of patients as found in this institution by the reclassification. It also shows the considerable number of patients with no mental disorder that should have been released to the community.

TABLE 5.

	Male	Female	Total
Psychotic	231	382	613
Mental Defective	207	184	391
No Mental Disorder	23	66	89
Others	104	61	165

The sixth table shows the ratios and the per cent of males and females of the psychotic, mental defectives, no mental disorder, and other groups. This merely points out in percentage figures, the findings of the previous chart.

TABLE 6.

	Male	Female	Total
Psychotic	18.3	30.4	48.7
Mental Defective	16.5	14.6	31.1
No Mental Disorder	1.8	5.2	7.1
Others	8.3	4.8	13.1

In general these charts of the entire reclassification procedure point out several things.

Most important, if it could be verified in other institutions with a similar procedure of reclassification, is that *as the the length of institutionalization increases, so do the number of psychotics* within the patient population. Whether or not institutionalization in a custodial type of setting is responsible or is only one factor, we are not prepared to state. We certainly recognized that the length of stay can be contributory and that once past the age of 60, the psychosis could be due to a degenerative brain disorder.

THESE findings indicate that there is *no need for special institutions for epileptics*. Certainly the number of patients found by means of this reclassification of the population, who could and have been returned to the community (and are adjusting well therein) is evidence that an epileptic village is not only unnecessary but an evil. The largest number of psychotics and mentally defective patients could be better cared for in an institutional setting specifically for the treatment and rehabilitation of these disorders.

Perhaps the large number of psychotic patients found in this study is not a barometer of the community reaction necessarily towards seizures *per se* but more likely towards the abnormal actions of the psychoses or mental deficiencies superimposed on the epileptic. Thus the general practitioner was not committing patients for seizures but for other disorders or actions. Carried with this wave of institutionalization, however, are many patients committed only because of their seizures, perhaps because the community fears they may react as the psychotic or mentally defective. Epileptic reactions in the lay mind are often related to the actions of the psychotic or mentally defective who also has seizures.

In summary, the entire patient population of a former State Village for Epileptics was classified according to the new American Psychiatric Association's Diagnostic Manual. The results of this classification have been shown in regard to sex, age, and length of hospital stay. The conclusions drawn appear to fortify the professional thinking of the present that the abandonment of specific institutions for the custodial care of epileptics is indicated.

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Proctology in Office Practice*

In this veritable textbook of office proctology, Dr. Gorsch tells what the general practitioner can do and cannot do; and he describes how to do it . . . and how not to do it.

This paper will offer some practical considerations in the examination of the proctologic patient and briefly discuss the scope of office treatment in the more important and commoner anorectal conditions.

Proctoscopic examination particularly in the proctologic patient will disclose about 10 per cent of precancerous lesions. Some of these are already frankly malignant. The general practitioner should thus contribute his share to cancer prophylaxis and early cancer diagnosis by doing a satisfactory proctoscopy or having one done elsewhere. The overall cancer detection batting average of the general practitioners will increase in direct proportion to the number of proctoscopies or sigmoidoscopies he does. His present batting average is well below 300. The proctologic diagnosis of course depends on the good history and examination.

RECTAL BLEEDING

Rectal bleeding is the commonest and most important proctologic symptom. The bleeding which is contained in or on the stool is usually more significant of rectal or colonic tumors or severe ulcerative lesions than is blood on the toilet paper. Bleeding alone, occult or gross is often the only symptom in the most important rectocolonic conditions and many patients are unaware of it for long periods. Patients should be advised to give a passing look before flushing the toilet bowl. A proctoscopic examination done immediately or shortly following bleeding may be more informative as to the site of bleeding than that following bowel preparation. If the rectum and lower sigmoid are negative the source of the visible blood streaks is probably in the colon. Unexplained bleeding calls for a complete radiologic study.

The triad of (1) bleeding, (2) change in bowel rhythm, either constipation or diarrhea, and (3) abdominal pain or cramping is highly suggestive of rectosigmoidal cancer and, unfortunately, not early cancer.

THE PROCTOLOGIC EXAMINATION

Digital examination of the rectum is the simplest and easiest part of the proctologic examination. No orifial examination is more informative if the examining finger reaches well up into the rectal ampulla and palpates the adjacent viscera, cervix, urethra, prostate vesicles, ischial spines and coccyx. It makes the diagnosis in about 50 per cent of rectal cancer. A natural reluctance frequently combined with anal muscle spasm and a painful anal lesion often precludes a satisfactory digital examination. But although it is a little time consuming, the anal sphincters can be anesthetized with an aqueous or oil soluble anesthetic. This greatly facilitates the anoscopic and particularly the subsequent proctoscopic

*Read May 17, 1954, Annual Meeting, The Medical Society of New Jersey.

examination. Digital examination is perferably done in the lateral Simms or lithotomy position: never in the knee chest. The patient's emotional reactions to the digital examination are significant to the subsequent ano-proctoscopy.

Examination of the anal canal is often done on withdrawal of the proctoscope. However, in the commonest anorectal conditions (hemorrhoids, fissure, fistulas, crytitis and papillitis, and anal infections) instrumentation is often necessary for complete diagnosis and evaluation of subsequent treatment. The anoscopic examination is sometimes more advantageously done in the knee chest or inverted positions.

SIGMOIDOSCOPIC EXAMINATION

MANY patients with proctologic symptoms are never proctoscoped. This accounts for a good proportion of the cancer patients beyond surgical help.

Proctoscopy and sigmoidoscopy are loosely used terms and often interchanged. They should be recorded in terms of the size of the scope and the distance reached above the dentate line.

While proctoscopy is a relatively simple procedure, sigmoidoscopy is somewhat more difficult. In about 10 per cent of patients (particularly those with previous pelvic surgery) it may be impossible.

The sigmoidoscope is readily passed under direct vision to the rectosigmoidal junction, which can usually be recognized by change in color, vascularity and the circular rugae. Further advance into the sigmoid under direct vision is easy when the axis of the sigmoid is more or less straight and the progress for the tube readily visible.

However, this is rather the exception. It is usually necessary to advance the tube in the sigmoid step by step assisted by gentle inflation or sounding with a cotton wound applicator or alligator forceps. The tube is advanced in the usually curving axis of the gut. Some traction either on the mesosigmoid, rectum, or anal musculature is almost inevitable. Pain or abdominal cramping is usually produced. If patients are not forewarned and reassured as the tube is advanced, their mounting fear, anxiety and increased abdominal pressure often abruptly end the examination. The patient's cooperation is vital. No force should be used. If the tube is directed in the proper axis it will usually elevate and unroll the sigmoid by its own weight. However, the length of the mesentery and angulation of the sigmoid quite apart from pathologic fixations may preclude a sigmoidoscopy. The possibilities of perforation in difficult manipulations are usually out of all proportion to any additional information to be gained.

A clean bowel is essential. The best preparation is castor oil with additional tap water enemas. However, patients complaining of diarrhea with bleeding, abdominal cramps or pain, suspicious appendicitis, diverticulosis and obstruction should not be prepared with catharsis.

Preparation for sigmoidoscopy may suffice for later barium enema studies in cooperation with the radiologist. I am not in favor of simultaneous sigmoidoscopies and barium enema studies. The best position is the inverted.

For proctologic examination in infants and children, anesthesia is usually necessary. Nembutal® in appropriate dosage combined with codeine on the basis of age and weight is the preferable analgesic. Codeine is given in 1/16 to 1/6 grain doses along with 1/500 of a grain of atropine.

	Nembutal®
6 mos.	30 mgs.
1 yr.	50 mgs.
2 yrs.	60 mgs.
4 yrs.	90 mgs.

No special instruments or tables are required. The commonest conditions in infancy and childhood are polyps, fissure, prolapse, pinworms and congenital anomalies.

RADIOLOGIC STUDIES

RADIOLOGIC study of the colon implies that rectum and lower sigmoid disease have been excluded by proctoscopy and sigmoidoscopy. No diagnostic method can be substituted for direct visualization of the rectum and lower

sigmoid where 70 per cent of adenomas and carcinoma of the large gut are found. These areas are not primarily the responsibility of the radiologist.

The diagnosis of tumors above the visible sigmoid is a radiologic problem. Small tumors require special air contrast technics often repeated. Those under 2 centimeters are difficult to spot with any technic. Small particles of feces are a constant source of confusion. If surgery is anticipated it is wise to have a second confirmatory x-ray. Repeated negative radiologic findings in patients with persistent rectal bleeding should be disregarded. That patient should be surgically explored.

EXTERNAL HEMORRHOIDS

TREATMENT of the unilateral external thrombotic hemorrhoid is a simple and satisfactory office or ambulant procedure. The hemorrhoid may be removed under local procaine anesthesia which I usually supplement with an oil soluble anesthetic: Anucaine.® The simplest technic is to shell out the clots through an oval excision of the overlying skin. Hemostasis should be complete. The wound is left open and not packed. The simplest dressing is Aristol® powder (thymol iodide). If excision is not desired the simple injection of 5 to 8 cubic centimeters of an oil soluble anesthetic below the clot will relieve pain and anal spasm and hasten resolution.

How about the patient with a complete perianal corona of external thrombotic piles? The treatment here is simply warm astringent applications, laxation, sedatives and anti-histamine preparations. If there is no local infection, and if pain is severe, an oil-soluble anesthetic, such as Anucaine®, may be useful. In these patients, there is nothing to be gained by the complete evacuation of the hemorrhoids whether this is done in the office, clinic or operating room. This is too traumatic a procedure.

Thrombotic piles may be indicative of associated local or general disease. For this reason, the conscientious practitioner always does a complete proctologic examination and does not casually dispose of the matter as "just a case of piles."

INTERNAL HEMORRHOIDS

THE injection (or "sclerosing" treatment) of internal hemorrhoids is a simple office procedure in properly selected cases. Under no circumstances, however, should any patient be injected for hemorrhoids without a complete proctoscopic examination.

The practitioner directly or indirectly makes the decision for or against the injection treatment. There are variant arguments, some of them specious, for or against injections in all varieties of hemorrhoids. In some quarters *all* hemorrhoids are considered surgical, a dictum with which I flatly disagree. I consider the injection treatment an indicated and preferable procedure in uncomplicated first degree hemorrhoids. If the practitioner does not inject hemorrhoids the patient is preferably referred to a qualified proctologist. Many patients are initially observed by the general practitioner who complain of occasional bleeding, anal discomfort, sense of fullness or incomplete evacuation, moisture or pruritus which are erroneously called internal hemorrhoids.

This syndrome, often noted in patients harassed by anxiety, could more correctly be termed "hemorrhoidal disease." Actually many of these patients have infected anal canals with a low grade proctitis in which the bleeding and minor complaints stem from superficial congestion and erosions in the mucosa overlying the internal hemorrhoidal plexus rather than from actual hemorrhoids. Radical and overzealous hemorrhoidectomy in these patients results often enough in the stenotic fibrous anal canal with frozen musculature. This is a complication infinitely worse and less amenable to treatment than the original simple hemorrhoidal disease.

Furthermore a few simple injections with adjunctive medical advice regarding bowel habits is no contraindication to subsequent surgery. Time does not permit detailed description of the injection method. I here offer a few general comments. The practitioner must be

equipped with properly lighted instruments and he must be familiar with at least the surface anatomy of the anal canal. He must be able to identify positively the dentate or ano-rectal line. The safest and most effective sclerosing solutions are 6 per cent phenol in sweet almond oil, 5 per cent quinine and urea or "quinuride." If quinine is used epinephrin, Benadryl® or Chlortrimeton® and Aminophylin® should be immediately available for parenteral use.

The injections are sometimes easier to do with the patient in the knee-shoulder or chest position or in the inverted position.

A rectocele, whether in the male or female, should *not* be misinterpreted as a hemorrhoid. Injection in the anterior midline above the sphincters in both sexes entails some risk of sloughing and fistulization. The injection treatment is occasionally useful in excluding internal hemorrhoids as a source of obscure rectal bleeding.

STRANGULATED HEMORRHOIDS

ONE of the occasional complications of a prolapsed internal pile is the strangulated hemorrhoid. Usually this can be managed in the office or even at the patient's home. The key to such ambulatory management is gentle dilatation of the sphincter with reduction followed by local and general palliative sitz baths, dehydrating applications, antispasmodics and sedation. Since these are potentially infected cases, antibiotic therapy may be helpful particularly if immediate surgery is contemplated.

External thrombotic hemorrhoids are not infrequently confused with prolapsed internal strangulated hemorrhoids. Misguided attempts to reduce the former only aggravate the condition.

ANAL FISSURE

AN anal fissure is a common and painful proctologic disorder. The patient gives a history of repeated episodes of pain following bowel movements with bleeding. Inspection confirms the diagnosis.

The response of anal fissure to office management depends almost entirely on its duration and the extent of the fissure pathology. These cases are conveniently divided into acute and chronic forms. The acute recent fissure is a linear rupture or erosion of the anoderm, usually posteriorly. Inasmuch as complete relaxation of the anal sphincter is essential to healing, I inject the perianal tissues and bed of the fissure with 2 per cent procaine or an oil-soluble anesthetic followed by the usual palliative measures of dilatation sitz baths, catharsis, sedatives and the local application of 5 per cent scarlet R. ointment. The common practice of applying a silver nitrate stick to a fissure without anesthesia simply adds to the patient's distress.

In the *chronic* or "indurated" fissure, one usually finds the irreversible triad of pectenosis or anal fibrosis, with anal spasm, the polyp above the fissure and the sentinel pile externally. This is a "surgical" fissure. It requires complete excision of the fissure and its associated disease tissue. It calls for complete division of the subcutaneous external sphincter muscle. The common practice of treating this fissure with habitual catharsis, especially mineral oil, anesthetic ointments and suppositories and by so-called "soft diets" is to be severely condemned. This amateurish therapy may simply provoke additional gastro-intestinal and neurologic symptoms.

ANAL STENOSIS

ANAL stenosis is a common but easily overlooked condition. It is often found in the patient with chronic anal fissure. It results from repeated sphincter spasm, anal infection, cryptitis, fibrosis, "pectenosis" and habitual catharsis. It occasionally follows over-enthusiastic "proctoplastic" hemorrhoidectomy. Anal stenosis accounts for the inability of these patients to empty the rectum completely. This is *not* constipation.

Fissures in infants and young children should be treated by periodic dilatation, anesthetic scarlet R. ointments, and daily enemas of Phospho-Soda.® Occasionally surgery is necessary.

ANORECTAL ABSCESS

PERIANAL infections, such as furuncles, infected hair follicles and the superficial marginal abscess may be treated in the office. A careful digital examination is essential in order to exclude the deeper variety of abscesses. The deep abscess, ischio-anal, supralevator, or retro-rectal, must be drained without delay. Many of these infections have been active for some time and are well advanced when first observed by the practitioner. Further delay favors extensions to deeper spaces with complicating organisms and sometimes to a general sepsis. Particularly unfortunate is the practice of prescribing nonspecific antibiotic therapy in the wistful hope that this will magically "resolve" the abscess without requiring drainage; or that it will put off or delay the need for drainage. I can cite cases where complicated fistulas resulted from this delay. The practitioner may advantageously use antibiotic therapy before referring the patient for surgery. The most useful antibiotic is probably the penicillin and dihydrostreptomycin combination,* but this must be given with due regard to possible penicillin allergy. Subsequent antibiotic therapy should be guided by laboratory controls.

On the other hand, there are several kinds of peri-anal infection associated with fistula which must be treated conservatively. One is the abscess which complicates chronic ulcerative colitis. This should be drained by simple puncture and aspiration only. In these cases, in addition to the pyogenic infection there appears to be an unexplained deficiency factor in peri-anal wound healing, which underlies the chronic ulcerative colitis syndrome. Another is the abscess complicating regional ileitis. Another is the abscess complicating tuberculosis which may be a virgin tuberculous abscess or a secondary pyogenic infection. In either case these peri-anal abscesses in the tuberculous patient should be treated with the antituberculous drugs such as streptomycin or Marsalid®, and with minimum drainage.

In chronic ulcerative colitis and regional ileitis, peri-anal abscesses with fistulization are usually indicative of advanced disease in the colon or ileum.

The treatment of *anorectal fistula* is usually not an office procedure unless the tract is very short and superficial to all anal musculature. The ramifications of even superficial fistula tracts are sometimes deceptive.

*Tradenamed as Combiotic by Pfizer Laboratories.

PRURITIS ANI

THE newer anti-inflammatory steroids and the newer antihistaminics have materially broadened the scope of the general practitioner in the treatment of peri-anal skin lesions.

In idiopathic, intractable pruritus ani, hydrocortisone acetate ointment (1 to 2½ per cent) has given excellent results. The peri-anal skin is first cleansed with a detergent (such as Septisol®) before applying the ointment. ACTH and cortisone preparations may also be used with due regard to possible side-effects.

Occasionally, the intractable pruritus is associated with (or is secondary to) a local anorectal lesion such as, fissure or prolapsing hemorrhoids. Surgery may be advised for the anorectal lesions *per se* but its curative effects on the pruritus are often disappointing and patients should be so advised.

The pruritus secondary to antibiotic therapy usually responds to antifungicidal ointments or powders, starch enemas and lactic acid preparations by mouth.

A severe pruritus with diarrhea in the course of antibiotic therapy (particularly Terramycin®) may be indicative of a severe staphylococcus enterocolitis which may terminate fatally. Ilotycin® is specific in these cases.

Antibiotics given intravenously are less likely to produce severe changes in the bacterial symbiosis of the colon.

CONDYLOMATA ACUMINATA

OFFICE treatment of venereal warts consists in the application of 20 per cent Podophyllin® in compound tincture of benzoin every 48

hours. Large lesions should be treated in sections. Podophyllin® is highly irritating to normal skin.

CHRONIC ULCERATIVE COLITIS

THE rectum is nearly always involved in chronic ulcerative colitis. For this reason, a proctoscopic examination is indicated. Early in the disease, an important finding is the vulnerability of the mucosa. Even gentle swabbing of the mucosa is followed by bleeding from a typical red granular finely ulcerated surface. This finding together with a history of a purulent bloody diarrhea and a high sedimentation rate is almost pathognomonic of ulcerative colitis. This vulnerability of the mucosa likewise increases before the common exacerbations, and in the ambulant chronic ulcerative colitis patient, periodic proctoscopies are indicated. Never prepare these patients with catharsis or enemas until you have looked at the bowel.

In early cases, x-ray findings show only linear superficial serrations or tiny indentations which must be carefully looked for; quite the contrary is true in the late cases. The therapeutic dilemma in this disease is whether and when to do the ileostomy and/or colectomy. Ileostomy usually means an eventual colectomy. In fulminating cases with rapid loss in electrolytes and excessive bleeding, who fail to respond during a week of medical management, ileostomy or colectomy is indicated.

ACTH in my experience has been useful before surgery but disappointing in the medical management. It may retard wound healing. This disease *per se* is incurable by medical means despite long remissions. The greatest hazard is perhaps malignant degeneration which occurs in about a third of the patients who have had the disease more than ten years.

ADENOMATOUS POLYPS

MANY small adenomatous polyps are missed by not looking. Or, they are overlooked in the poorly prepared bowel. The diagnosis of small adenomatous polyps is made by routine proctoscopy in about 50 per cent of the cases. The commonest adenoma is a tiny sessilated bean-sized tumor about 5 millimeters in diameter. This may be readily removed in the office by the general practitioner with biopsy forceps followed by desiccation or coagulation of the base and surrounding mucosa. Or they may be totally destroyed, without biopsy, with the desiccating current which may be the preferable method in those above the peritoneal reflection. Coagulating current should not be used above the peritoneal reflection.

If the patient has a larger sessilated or pedunculated polyp, the question of malignant degeneration arises. This is answered by histologic section of the entire tumor. Polyps below the peritoneal reflection with thin pedicles are preferably removed *in toto* by the electric snare. This can be an office procedure. Those above the peritoneal reflection are preferably hospitalized.

"Fractional fulguration" or desiccation is sometimes used as an office procedure in the larger and pedunculated sessilated adenomas, with and without biopsies. However, the hazard of leaving residual carcinoma with this method should be fully appreciated.

The adenoma which is broad based, fixed, superficially ulcerated and over 2 centimeters in diameter is already malignant. It requires radical surgery. The closer this malignant adenoma is to the dentate line the greater are its potentialities for regional metastases.

In general the office treatment of polyps should be confined to the common small sessilated adenoma and the polyp with the thin pedicle.

There is no argument about the value of colonic x-ray studies in the single polyp. When two or more polyps are observed it is advisable to study the colon radiologically.

Occasionally a pedunculated polyp is observed protruding from the anus particularly in young children. Before manipulation, a ligature should be tied around its pedicle since its attachment may be high in the bowel above proctoscopic view.

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Henry Leber Coit: 1854-1917

Pioneer in Public Health

Like a prophet without honor in his own country, that extraordinary pioneer, Dr. Henry Coit, is internationally accoladed for his ground-breaking work in pediatries, public health, and milk sanitation. But perhaps too few of us in New Jersey know about him. Dr. Rogers' reminder is therefore doubly welcome. This manuscript was received in 1954, the centennial of Dr. Coit's birth.

During the past year birthday centennials were celebrated in Europe and America honoring two Nobel prize laureates in medicine, Paul Ehrlich and Emil Von Behring, as well as William Crawford Gorgas, medical conqueror of Cuba and Panama. In contrast, the birth one hundred years ago of Henry Leber Coit, pioneer in public health and outstanding New Jersey citizen, passed largely unnoticed. Originator of certified milk, champion of preventive medicine, first pediatrician at, and founder of the Babies' Hospital in Newark, Coit's achievements have left their impact on the course of public health throughout the world. His signal contributions to milk sanitation, infant and child welfare and health education have made untold thousands of lives happier and longer in this century. Just last year (1953) Dr. Coit was included among the great pioneers of public health in America by the American Public Health Association, being cited as one of the five foremost leaders in the field of milk sanitation.

From the time of a man's death, memory of him begins to fade. Little can arrest this decline. The story of how Dr. Coit originated certified milk has been told more than once, but the story of service so great and important to humanity as his cannot be told too often. It is especially appropriate now, a century after his birth, to review the life and work of this outstanding physician.

In our comparative security against epidemics today, it is difficult to realize the annual death and disease rolls of fifty years ago from diseases now under control. Improved standards of health and lengthened life span are taken for granted by most Americans. These benefits did not come about, however, without Herculean efforts on the part of the medical and allied professions. The relatively recent conquest of diseases spread by water, milk and foods and those transmitted by insects constitutes one of the technical triumphs of man. The four major phases of the modern public health movement—sanitation, control of community infections, education in personal hygiene, and organization of medical services for the diagnosis and treatment of disease—have accomplished phenomenal results during the past half-century. Henry Leber Coit contributed in some measure to progress in each of these four fields.

Dr. Coit is remembered today chiefly for

*The author wishes to acknowledge the assistance of his father, Lawrence H. Rogers, M.D., who was associated with Dr. Coit as an intern at the Presbyterian Hospital, New York City.

his pioneer work in milk sanitation. America's unique supply of safe, wholesome milk and milk products (today constituting 16 per cent of the average diet in the United States) is a lasting monument to his genius. Largely through his untiring efforts, the incidence of milk-borne diseases has been tremendously reduced. These diseases include tuberculosis, typhoid and paratyphoid fevers, diphtheria, gastro-enteritis and food poisoning, scarlet fever, septic sore throat, and undulant fever. A direct result of his labors was the production, only 62 years ago, of certified milk—the first clean and safe milk to result from an organized effort in that particular direction. At the same time his preoccupation with health measures roused the medical profession to take a definite stand in matters of health. For this reason, Dr. Coit has been called the originator of pure food propaganda in this country. He stressed the education of producer and consumer alike to the paramount importance of wholesome food.

HENRY LEBER COIT was born in Peapack, N. J., on March 16, 1854. His father, a Methodist minister, died when his son was twelve years old. To help support himself and his mother the boy obtained a position in a drugstore in Newark, working long hours and sleeping under the counter at night. Following education in the public schools, he was graduated as valedictorian from the College of Pharmacy in New York in 1876. He then worked as a chemist with Tarrant and Company in New York and served as instructor in the College of Pharmacy while attending medical college. Receiving his M.D. degree from the College of Physicians and Surgeons of Columbia University in 1883, he served an internship in Newark before beginning practice there in the following year.

Dr. Coit soon became a successful general practitioner. He married Emma Gwinnell of Newark in 1886; their union produced three daughters and two sons. It was the unforgettable death of his first son, during a diphtheria epidemic, that began Coit's inspired crusade to improve the health of all infants and children.

Seeking pure milk for his dying son, he saw the filthy conditions of the farm of a dairyman who sold milk to the people of Newark, hand-dipping it from a forty-quart can. Realizing that such unsanitary conditions must be corrected, he devoted much time during the next several years travelling about the surrounding countryside by horse and buggy, visiting farms, learning dairymen's problems and devising ways of solving them. During this period he also gradually limited his practice to pediatrics, the specialty which became his life work.

Conscious of the lack of control of milk production in that day and convinced of the dangers inherent in impure milk, Coit tried unsuccessfully at first to obtain state legislation to regulate the supply of clean milk. Undaunted, he presented his plan to the Practitioners' Club of Newark, the leading organization of Newark physicians of that day. The project was heartily endorsed. On December 5, 1892, Dr. Coit read his historic paper before the Practitioners' Club, presenting a plan which provided for chemical, bacteriologic and veterinary standards of milk production with medical supervision of dairy hygiene as well as the health of the employees. He proposed regulations for the care and the health of the cows, their pasturage, the ventilation and cleanliness of the barns, the health and hygiene of herdsmen and milk handlers, and the conditions under which the milking, cooling and bottling of milk were to take place. Not only were these facts to be assured by regular inspections, but the milk was also to be checked by culture and by count of its bacterial content. Chemical analysis would ensure a constant nutritive value. This original plan in its essentials remains unchanged today. The resulting raw milk, of highest quality, was known as "certified milk," a term coined by Dr. Coit himself. His own definition of certified milk (adopted by the New Jersey State Department of Health in 1909) is lucid: "Certified milk is a product of dairies operated under the direction of a medical milk commission, which body is appointed for voluntary service by a medical society. The milk is designed to fulfill standards of quality, purity and safety to ensure its adaptability for clinical purposes and the feeding of infants."

A commission was formed, composed of local physicians, to investigate the problems relevant to obtaining a pure milk supply. As a result of this investigation, necessary legislation was enacted and the Medical Milk Commission of Essex County established in 1893. This was the first organization of its kind in the world and Dr. Coit was its first president. Three years later another medical milk commission was formed in New York, and, in 1897, one in Philadelphia. By the time of Dr. Coit's death (1917), over sixty commissions were operating in the United States, two in Canada, and several in Europe and Asia.

Coincident to the establishment of the Essex County Medical Milk Commission, a leading dairy farm in Caldwell accepted the challenge to produce this highest quality milk. From the famous Fairfield Dairy of Mr. Stephen Francisco, a dairyman devoted to the cause of wholesome milk, came the first bottle of certified milk. This was also the first time that commercial milk was dispensed in individual bottles. The first bottle, tied with a blue ribbon, was delivered to Mrs. Coit—whose encouragement and loyalty had contributed so much to her husband's success. Mrs. Coit in turn gave the milk to her two year-old daughter.

Through a novel voluntary contract between the dairymen and the Medical Milk Commission, Dr. Coit easily convinced milk producers that it was good business as well as good public health to deliver milk that was fit to drink. So successful was the experiment that in 1900 a refrigerated twelve-quart case of certified milk was shipped to Europe and back and was found to be "sweet and wholesome" four weeks after its production.

Subsequent events in the certified milk program were the founding of the American Association of Medical Milk Commissions and organization of the Certified Milk Producer's Association of America in 1907, the production of milk high in vitamin D, and, some twenty years ago, the regulation adopted by the Boston Commission permitting and encouraging its dealers to pasteurize their milk. Until that time no sterilizing factor had been permitted; from then on, despite initial disapproval of the American Association, the safeguard of pasteurization was added to the strict rules prescribing the production and handling of certified milk. The original certified milk, however, had afforded a safe raw milk when much of the milk supply was unclean and when raw milk was considered the only suitable milk for infant feeding. During the past sixty years, moreover, in the face of further advances, it has served as a guide in helping raise the quality of the entire milk supply.

Coit's interest in children was evident early in his career. The first practicing pediatrician in Newark, he was also one of the earliest physicians to devote all his time to this specialty. His pediatric practice soon became a large and successful one. He contributed much by devising new formulas for artificial infant feeding. In 1910 Dr. Coit became a founder and first president of the New Jersey Pediatric Society. His presidential address, *Factors in the Conservation of Child Life,* outlined a practical program for promoting child health, and expressed his great love for children. "The gift of children," he said, "is the most precious gift of God to mankind. It is the natural right of every child born into the world to remain and grow to years of efficiency. . . . Conservation of child life is a question of vastly more importance to the American people and vital to the integrity of the nation than the conservation of minerals, rivers or forest preserves."

Another great contribution by Dr. Coit was the founding in 1896 of the Babies' Hospital of Newark, now appropriately called the Coit Memorial. This hospital was the second of its kind in the United States, the first being in New York City. Its founding also can be traced directly to his son's death. Realizing that the general hospital of that day was not properly equipped for the care of infants, Coit enlisted the support of several prominent Newark citizens to establish a special hospital for that purpose. From humble beginnings in a converted house came the well-equipped, hundred-bed hospital of today. Along with the original Ba-

bies' Hospital, several "Baby Keep Well Stations" were also opened in different parts of Newark to supplement the central clinic established for that purpose.

Further opportunity for outstanding public service came to Dr. Coit during the severe poliomyelitis epidemic in 1916. Although 62 years old at the time, he worked untiringly to help care for the victims of infantile paralysis. He organized the Citizens' Relief Committee and collected thousands of dollars to help defray the expense of prolonged patient care. He secured a physiotherapist from Boston to train eight Newark nurses in the massage and muscle training technics so vital in rehabilitating victims of the disease.

THESE heroic efforts during the poliomyelitis epidemic provided Dr. Coit with still another opportunity to stress the cardinal importance of public education in matters of health. A pioneer medical propagandist, his more than twenty-five published articles illustrate a wide range of professional interests. These publications include: "The Feeding of Infants" (1890), "The Care of the Baby" (1894), "Causation of Disease by Milk" (1894), "Remarks on . . . Diphtheria in Montclair and the Milk Supply" (1901), "Rational Infant Feeding" (1902), "The Medical Milk Commission" (1903), "Medical Milk Charities" (1911), "Functions of a State Pediatric Society" (1911), "The Public School as a Factor in Preventing Infant and Child Mortality" (1912), "Certified Milk" (1912), "The Relation of the Physician to Philanthropic and Sociologic Work of the Community in Child Life" (1912), 'The Danger of Bovine Tuberculosis" (1915), and "The Newark Plan for the After-Care of Victims of Infantile Paralysis" (1916). In addition to his own contributions to various journals, Dr. Coit served for several years as collaborating editor of the *Archives of Pediatrics*.

Numerous distinctions came to Dr. Coit during his lifetime. In addition to those already mentioned, he was twice president of the American Association of Medical Milk Commissions and Vice President of the International Society of Milk Dispensaries (Goutte de Lait) with headquarters in Brussels, Belgium. He travelled to Europe four times to attend medical congresses. His work in preventive medicine received international recognition. Translations of several of his papers were published in European medical journals.

A man of quiet and admirable traits of character, Dr. Coit was beloved for his devotion to the cause of public health and his unceasing efforts in the behalf of children, his city and profession. Combining scientific skill with a genuine humanitarian spirit, he helped make the world a happier and healthier place in which to live. His life and works still serve as a source of inspiration to the medical profession.

Henry Leber Coit died of pneumonia on March 12, 1917. The esteem with which he was regarded by his colleagues was emphasized then by his coworker, Dr. Elmer G. Wherry, later director of the Coit Memorial Hospital. At a meeting of the Newark Practitioners' Club, its members stood in silence to honor the pioneer in public health whose birthday centennial we so recently commemorated. Dr. Wherry's tribute at that time included these words: "It is impossible to tell in a few words, or in many words, my appreciation of Dr. Coit. . . . He was both good and great. . . . He was both a visionary and a doer of deeds. He saw visions and dreamed dreams, and after long years of persistent and patient effort his visions are realities, his dreams have come true.

"His memory is an inspiration. His good deeds are an example. His humanitarian and altruistic spirit still lives. . . . He has left us a perpetual heritage."

Donnelly Memorial Hospitals

The author's reprints include ten bibliographic citations.

Proposed Constitutional Amendment

The following proposed amendment to the Constitution was approved by the House of Delegates at the 1954 Annual Meeting and will be presented for final approval at the meeting in April 1955. The proposed amendment is herewith published in full in compliance with the Constitutional provision to that effect.

ARTICLE IV—SECTION 5—HONORARY MEMBERS

Honorary Members shall be physicians and surgeons who have attained distinction within the medical profession, or nonmedical persons who have rendered signal service to The Medical Society of New Jersey or who have attained special eminence in scientific fields other than medicine. Nominations shall be submitted by recognized medical groups to the Committee on Honorary Membership for approval or disapproval, and the committee's action shall be transmitted to the Board of Trustees by December first. Nominations approved by the Board of Trustees shall be officially sent to the component county medical societies at least three (3) months before the annual meeting at which action is to be taken, and the approval of a majority of the component county medical societies shall be required to validate the nomination before it can be submitted to the House of Delegates (delete, ", and who") Nominees may be elected by a two-thirds vote of the House of Delegates (delete, "after having been recommended by the Committee on Honorary Membership,") provided the number of living Honoray Members does not exceed fifteen (15). Presentation of the honorary membership shall be made at the following annual meeting. Honorary Members shall have all the privileges of members, but shall not be members of the corporate body.

Woman of the Year: M.S.N.J. Member

The Woman of the Year for 1954, selected by Branch Four of the American Medical Women's Association, is a member of The Medical Society of New Jersey. She is Dr. Ellen C. Potter, recently retired as Deputy Commissioner of Institutions and Agencies, living in Trenton, and a member of our Mercer County Medical Society. Only last February, the Trenton Council of Women's Clubs selected Dr. Potter as Trenton's Woman of the Year, so the national honor seems to make it unanimous. In 1949 Dr. Potter was laureate of the Terry Memorial Merit Plaque, an extraordinary award of the American Public Health Association. She is the eponym of a special scholarship at Rutgers for study in social work, and also the eponym of the Trenton College Club's international grant. She is also . . .

Space fails us. Ellen Potter is the Woman of this year and of a great many other years. Congratulations to the organizations that have recognized that!

Obituaries • • •

DR. CARMINE BERARDINELLI

One of the state's leaders in pathology and forensic medicine died on November 8, 1954 with the passing on that day of Dr. Carmine Berardinelli. Born abroad in 1876, Dr. Berardinelli received his M.D. degree from the Royal University at Naples. He came to Newark in 1903. After doing general practice until 1917, he was commissioned in the U.S. Army as a lieutenant, later captain, then major. In the Army he formed an association with the late Harrison S. Martland, and in 1926 became Deputy County Physician. He was first assistant to the Chief Medical Examiner from 1931 until his retirement from that post in 1953. He was past-president of the Essex County Anatomical and Pathological Society.

DR. MAURICE M. CHAPNICK

Long active in medical and civic affairs in Passaic County, Dr. Maurice M. Chapnick of Paterson died on November 8, 1954 at the Barnert Memorial Hospital. Born in New York, Dr. Chapnick was graduated from the medical school of Tufts University in 1921. His pre-medical education had been interrupted by World War I, when he served a tour of duty in the Navy. He came to Passaic for his internship, liked our state, and had been here ever since. He was only 58 at the time of his untimely death. Dr. Chapnick was affiliated with all three hospitals in Paterson.

DR. MORTIMER H. LINDEN

On November 12, 1954, Dr. Mortimer H. Linden, while driving through the Lincoln Tunnel was seized with severe abdominal pain. He was taken to St. Clare's Hospital in New York where he was found to have a ruptured abdominal aorta and he died shortly after admission.

Born in New York in 1887, Dr. Linden was graduated from the Long Island College of Medicine in 1910. He spent the next decade in England where he did graduate work in gastro-enterology, then was commissioned in the Medical Corps of the U. S. Army. He remained in England for a year after being demobilized, returned to the United States and opened an office in Jersey City. He practiced in the Hudson County metropolis for more than 30 years and at the time of his death was chief of the gastro-enterologic clinic at Christ Hospital in Jersey City.

DR. MAURICE RONA

Dr. Maurice Rona died at his New Brunswick home on October 14, 1954. Born in Hungary 65 years ago, Dr. Rona came to this country in 1922. He was certified by the American Board of Radiology in 1937. He invented an adjusting device for taking x-ray pictures which was granted a patent in 1938. Dr. Rona was active in the affairs of the Middlesex County Medical Society, and on the staffs of both Middlesex General and St. Peter's Hospital.

DR. CARL W. SCHOENAU

The December 1954 issue of this JOURNAL carried an article by Dr. Schoenau. At the time the manuscript was received, Dr. Schoenau was a vigorous, 50-year old physician, one of the leading urologists of west Essex. On November 11, 1954, he was suddenly stricken with a fatal heart attack.

Born in Philadelphia, Dr. Schoenau was graduated from the Hahnemann Medical College there in 1933. He had been a pharmacist prior to entering medical school. He won an internship at the Mountainside Hospital in Glen Ridge, N. J., and remained in the west Essex area ever since. He was a pioneer in blood bank work and is officially credited with having established Mountainside's first blood bank. At first devoted to anesthesia, he developed an interest in urologic surgery, and abandoned practice for some years in order to enter that specialty. At Bellevue, he went through the echelons from assistant resident, to resident, to chief resident in urology. He became affiliated with both the East Orange General Hospital and the Mountainside Hospital and at the time of his death was assistant attending urologist at Mountainside and chief of urology at East Orange General.

Announcements • • •

Seventh Annual Meeting AAFS

The Seventh Annual Meeting of the American Academy of Forensic Sciences will be held in the Biltmore Hotel in Los Angeles on February 17, 18, 19, 1955. President of the Academy this year is Dr. A. W. Freireich, of New York. Chairman of the Program Committee is Dr. Milton Helpern, Chief Medical Examiner of the City of New York. The American Medical Association has long urged that the profession take an increasing interest in medicolegal problems and the programs of the Academy meetings are a step in that direction. Further information may be obtained by writing to Dr. W. Camp, 1953 West Polk Street, Chicago.

Fellowships in Industrial Medicine

The Institute of Industrial Health of the University of Cincinnati will now accept applications for Fellowships in industrial medicine. Any graduate of a Class A medical school who has completed two years of training in an accredited hospital may apply. Private practice or service in the Armed Forces may be substituted for one year of training.

The course consists of two years of intensive training in industrial medicine, followed by one year of practical supervised experience. Candidates who complete satisfactorily the course of study will be awarded the degree of Doctor of Science in Industrial Medicine.

During the first two years, the stipends vary from $3,000 to $3,600 in the first year and $3,400 to $4,000 in the second year. In the third year the candidate will be compensated for his service by the industry in which he is completing his training.

A one-year course, without stipend, is also offered to qualified applicants.

Requests for additional information should be addressed to the Institute of Industrial Health, College of Medicine, Eden and Bethesda, Cincinnati 19, Ohio.

Treponema Pallida Immobilization Tests

Beginning January 1, 1955, blood specimens for Treponema pallida immobilization tests (TPI) can be processed by the Venereal Disease Research Laboratories of the Public Health Service.

Criteria for acceptance of specimens for the TPI test are:

1. Diagnostic problem cases with no history or clinical evidence of syphilis.
2. Patients with suggestive evidence of syphilitic infection who have not received treatment. If the patient has received any injected antibiotics within one month, or oral antibiotics within one week, of the drawing of the blood specimen, an invalid or inconclusive finding in the TPI test may result.

Physicians desiring to avail themselves of this test should communicate with: Division of Laboratories, State House, Trenton, New Jersey. On receipt of such request, instructions plus a clinical data sheet will be sent. The latter must be filled out and submitted with the specimen.

Bedell Lecture

The Bedell Lecture this year will be on Orbital Tumors. The lecturer is Algernon B. Reese of New York. This annual ophthalmological highlight will be at 11 a.m. on February 19, 1955 at the Wills Eye Hospital, 1601 Spring Garden Street in Philadelphia.

Pamphlet on Adolescence

U.S. Children's Bureau has published "The Adolescent in Your Family," the sixth in its series of pamphlets to help parents understand children. It is available at the U.S. Government Printing Office, Washington, D.C., for 25 cents. Others in the series are "Prenatal Care," "Infant Care," "Your Child from One to Six," "Your Child from Six to Twelve."

Authors' Clinic • • •

Capitals and Italics

Each month in this space, the Publication Committee or the Editor will present a problem in medical writing. Here, too, we will answer questions about the JOURNAL *in particular or medical writing in general.*

For some reason, doctors have a fondness for over-capitalizing.

Do not capitalize the names of diseases. It is "an epidemic of poliomyelitis" and not "—of Poliomyelitis." Do not capitalize specialties. It is "one of the most difficult problems in pediatrics" and not "problems in Pediatrics." Do not capitalize drugs or bacteria. Write "most streptococci are sensitive to penicillin," capitalizing neither "streptococci" nor "penicillin." Do not use a capital "X" for "x-rays" nor a capital "P" for "president" (unless it is part of a title. "President Smith urged . . ." but "Dr. Smith was elected president").* Do not capitalize organs or tissues. It is an "aneurysm of the aorta" and not "Aneurysm."

If a proper name, *used as a noun*, is part of the designation, that must be capitalized. So we write "thrombosis of the veins of Galen" or "obstruction of the foramen of Winslow." *When a proper name is converted into an adjective in both form and function, use a lower case letter.* Hence the drugs named for Galen are "galenicals" with a lower case "g." The seizures named for Hughlings Jackson are "jacksonian fits." The operation named for Julius Caesar is a "caesarian section." However, if the proper name is adjectival in function but retains its noun *form*, use a capital initial. Thus "Crede method," "McBurney's point" and "Sippy diet." Only when the form as well as the function is adjectival, do we lower-case the initial. Hence "eustachian tube" or "mendelian law," but "Bradford frame"; "fallopian tube," but "Bucky diaphragm."

The words "army" and "navy" are capitalized as nouns but not as adjectives. Hence, "Experience in the Army indicates" but "on the basis of army experience"; or "in accordance with naval practice" (or even "with navy practice"), but "in accordance with the customs of the Navy." If "Army" or "Navy" is part of a title it is capitalized as "The Caribbean Naval Hospital."

*Exceptions: (a) The President of the United States. (b) The President of the organization which publishes the journal concerned.

Whatever you underline in your manuscript, is set in italics by the printer. Use italics sparingly. When in doubt, do not underline. It is not necessary to use italics to indicate emphasis. (For instance, the word "not" was not underlined or italicized in the previous sentence). Do not italicize the names of bacteria. Though originally foreign words, they have become thoroughly naturalized. The rule is simple. Only three situations call for italics.

Marginal captions. Notice how italics are used for that purpose in this and the succeeding paragraph. The first major subdivision of your paper is set off by a capitalized caption in the middle of the column. The next lesser subdivision is indicated by an italicized heading on the same line as the first word of the paragraph, as is done in the paragraph below.

Foreign words. If not naturalized, foreign words are underlined. Thus phrases like *esprit-de-corps* and *Witzelsucht* appear here in italics and were underlined in the typed manuscript. These words are still foreign. They are not yet part of the English language. On the other hand, words like habeas corpus, globus pallidus and postmortem, though pure Latin in origin, have been completely absorbed into English. They are not italicized. When in doubt, do not underline. It is easier for the editor to draw a line under the word than for him to erase a line erroneously drawn.

Titles. Names of periodicals and books are italicized in text but never in footnotes and bibliographic lists. If your paper starts with the phrase "Since 1817 when James Parkinson wrote his famous essay *On the Shaking Palsy*, this syndrome has been known as . . .", the name of the book is underlined. In your footnote, you may refer to "Archives of Surgery" without underlining, but if the reference is written into the text (as "A review of the last twelve issues of the *Archives of Surgery* fails to disclose a single case report of . . . ") then the name of the periodical is underlined. The title of an article is never italicized.

If you are submitting a paper you read at a medical meeting, you may find that you had underlined many words in the manuscript simply to serve as eyecatchers while reading. Erase the underlining or have the manuscript retyped. Do not send it in that form.

County Society Reports • • •

Atlantic

A regular meeting of the *Medical Society of Atlantic County* was held at the Children's Seashore House, November 12, 1954, the president, Dr. Matthew Molitch presiding.

The scientific program was opened by Dr. Gene Schraeder who introduced Dr. Waldo Emerson, Professor of Pediatrics of Temple University. His subject was "Errors in Antibiotic Therapy."

The second portion of the scientific program was presented by Dr. Samuel Oressen, St. Christopher's Hospital, Philadelphia. He spoke of "Surgical Emergencies of the Gastro-intestinal Tract of the Newborn."

At the business meeting Dr. Timberlake reported as chairman of the Legislative Committee, Dr. Diskan for the Public Relations Committee, Dr. Uzzell for the Board of Censors, and Dr. Mishler for the Treasury.

A letter was read from the Congregation of Beth Israel extending an invitation to all these interested to attend a meeting with the subject "Medicine in the Bible" to be held the second Monday of each month at the Atlantic City Hospital at 8 p.m.

The meeting was adjourned at 10:30 p.m.

LEONARD B. ERBER, M.D.
Reporter

Gloucester

The *Gloucester County Medical Society* met at the Woodbury Country Club, November 18, 1954, Dr. John J. Laurusonis presiding. Dr. Chester I. Ulmer introduced the speaker of the evening, Dr. H. Keith Fischer, Assistant Professor of Psychiatry at Temple University. Dr. Fischer discussed the "Management of the Psychosomatic Patient" with emphasis on diagnosis and office and general hospital psychotherapy. Questions from the audience were answered by the lecturer.

It was announced that the Salk poliomyelitis vaccine can be secured from the local pharmacies.

Following a request from the Medical-Surgical Plan the following committee was appointed to secure a list of consultants in regional hospitals: Drs. Guy Campo, I. N. Patterson, Earl Wentzell, and Paul Pegau.

Drs. Robert Puff, Earl Wentzell, and Roger Lovelace were appointed to a new Tuberculosis Advisory Committee.

After much discussion it was unanimously decided to raise the dues of the society $10, which includes the $5 increase for the State Society, and $5 more for our county society treasury.

LOUIS K. COLLINS, M.D.
Reporter

Hudson

Hudson County Medical Society met in regular monthly session on November 2, 1954, at the Jersey City Medical Center. Dr. Sigmund C. Braunstein, president-elect, presided.

In a report of the Committee on Constitution and By-Laws, Dr. Edward Alpert, chairman, recommended an amendment to the Society's By-Laws whereby it would become obligatory that a physician be present at the regular monthly meeting at which he is to be elected to active membership.

Dr. Philip Greenberg, chairman of the Diabetes Committee, reported on arrangements for the observance of *Diabetes Week* in Hudson County. The St. Louis "Dreypak" is being distributed widely throughout the county through the cooperation of pharmacists, parent-teacher organizations and local hospitals.

Physicians elected to active membership were Dr. Frederick S. Barnes of Newark, Dr. Dwight M. Frost and Dr. Charles C. Terry of Secaucus; Dr. Gene I. Luongo of North Bergen, and Dr. John G. O'Brien and Dr. Daniel J. O'Regan of Jersey City.

The guest speaker, Dr. Mark M. Ravitch, Director of the Department of Surgery at Mount Sinai Hospital in New York City, presented an illustrated lecture on "The Present Scope of Cardiac Surgery."

STEPHEN A. MICKEWICH, M.D.
Reporter

Mercer

Mercer County Component Medical Society's Annual Banquet, under the chairmanship of Dr. Joseph R. Burns, was held at the Trenton Country Club, November 18, 1954. Two hundred members and guests were in attendance. They heard the Right Reverend Monsignor John L. McNulty, President of Seton Hall University, speak on "New Jersey's First Medical-Dental College at Seton Hall."

Scrolls were presented on behalf of the society by Dr. Arthur Sacks-Wilner to representatives of the local press and radio in recognition of outstanding services rendered the public and the medical profession in cooperation with the Woman's Auxiliary and our Public Relations Committee.

The guest speaker at Mercer County Component Medical Society's December meeting was Dr. J. Robert Willson, Professor of Obstetrics and Gynecology, Temple University School of Medicine, Philadelphia, whose subject was "Office Gynecology."

HENRY L. DREZNER, M.D.
Reporter

Middlesex

The regular monthly meeting of the *Middlesex County Medical Society* was held at the Roosevelt Hospital, Metuchen, on November 17, 1954. Dr. Malcolm Dunham, the president, presided. Minutes of the October meeting were approved.

Dr. Slobodien, acting for Dr. Haywood, read a report of the Judicial Medical Ethics Committee.

The following were elected to associate membership: Drs. T. A. Balinsky, Perth Amboy, John Dragan, New Brunswick, Severn T. Goldjuch, South River, N. A. Partenope, Colonia, and Eugene J. Gesselin, Rahway.

Dr. Michael J. Coffey of Iselin was elected to regular membership on transfer from the Essex County Medical Society and Dr. William B. Greenberg, Perth Amboy on transfer from the Hudson County Medical Society.

The following were elected to regular membership from associate membership: Drs. William Algair, South River, John H. Helff, New Brunwick, Arthur L. Roth, Metuchen and Walter A. Wadsworth of New Brunswick.

The Trustees elected Dr. Joseph F. Sandella, of New Brunswick as vice-president to fill the unexpired term of Dr. Bassett, deceased.

Dr. Paul C. Fagan, of St. Michael's Hospital in Newark, discussed the treatment of alcoholics.

Dr. Thomas H. Hogshead, Medical Supervisor for E. I. Du Pont de Nemours and Co. in Wilmington, Delaware, stressed the importance of getting problem drinkers under proper supervision. He praised the work of Alcoholics Anonymous.

Dr. C. Nelson Davis, Director of the Institute at Malvern, Pa., stated that alcoholism is a disease and that the interest of physicians in it should be stimulated.

IVAN B. SMITH, M.D.
Reporter

Morris

On November 18, 1954, the *Morris County Medical Society* met for its regular meeting. The meeting at the Warner-Chilcott Auditorium in Morris Plains was well attended.

After the usual business meeting, Dr. Stanley Bysshe, Associate Professor of Obstetrics at the College of Physicians and Surgeons, Columbia University, addressed the group on "Complications of Labor."

Dr. Bysshe presented a fine paper in which he detailed the complications of childbirth and outlined his ideas in the management of these complications.

Refreshments followed.

ALBERT ABRAHAM, M.D.
Reporter

Passaic

The regular monthly meeting of the *Passaic County Medical Society* was held on October 19, 1954, at the Medical Society Building. Dr. Thron, the president, presided. The guest speaker, Dr. Ralph Phillips, Professor of Clinical Radiology, Cornell University, spoke on "Radiotherapy—How, Why and Where."

The business session then followed. Elected to active membership was: Sanford L. Max, M.D., Paterson; elected to associate membership were Drs. Edward G. Krall, Fairlawn, Harold Lubin, North Haledon and Peter J. McDonnell, Paterson.

The following Resolutions on the deaths of several members were read and adopted:

IN MEMORIAM—DR. LOUIS COHEN, a practicing physician of Passaic, suffered a fatal myocardial infarction on April 17, 1954 at the age of 47. In 1933, he was graduated from Rush Medical School, Chicago. After completing a two year internship and residency in medicine and pathology, he returned to Passaic to practice medicine. He soon specialized in internal medicine.

Dr. Cohen was a humanitarian and was blessed with many friends. He possessed the qualities of the "horse and buggy" family physician combined with the knowledge of a modern specialist. To his patients he was a doctor, friend, and advisor. He was married to Deborah Blanche Levy of Tampa, Florida, who with three children, survive him.

BE IT RESOLVED, that the loss of our colleague, Dr. Louis Cohen, whose passing we mourn, be inscribed in full in the minutes of this meeting and that a copy thereof be sent to his bereaved family.

RESOLUTION on the death of THOMAS E. MANLY, M.D.

Dr. Thomas E. Manly, physician, surgeon and beloved colleague, died on June 13, 1954 after a short illness. Although he had been in poor health for some time he insisted on working and continued to do so until completely incapacitated.

Dr. Manly's career was colorful and varied. For many years during his early career he was very active politically being one of the few physicians who interested himself in civic, welfare and government work. His wealth lay not of the material things in life but in the men and women who idolized him and the innumerable friends and colleagues who respected and loved him. Born in New York in 1897, he received his medical degree from Fordham University in 1921.

After graduation, Dr. Manly came to Paterson as an intern at General Hospital. Subsequently he opened an office in the city and acquired a wide practice. He became a well known figure as a result of his civic and social activities. In less conspicuous manner he also won many friends through his medical work treating numerous patients from whom he refused to take payment. He was elected to the state's General Assembly in 1931.

In 1933, Dr. Manly was elected to a term as county sheriff. He also was a former health commissioner in Paterson.

WHEREAS: The loss of Doctor Manly has removed from our midst a beloved colleague of many talents whose friendliness and diversified interests will be greatly missed.

BE IT RESOLVED, that The Passaic County Medical Society expresses herewith its sympathy and condolences to Doctor Manly's family, and

BE IT FURTHER RESOLVED, that this Resolution be inscribed in full in the minutes of this meeting and that a copy be sent to his bereaved family.

"In the passing of DR. ANTHONY P. VERNAGLIA, The Passaic County Medical Society has lost an honorable member.

Dr. Vernaglia was an Associate in Anesthesia at the Paterson General Hospital since 1943. The Paterson General Hospital and the staff thereof has lost a valiant worker. He was faithful in the conduct of his duties and was held in high esteem by all the staff. He was a conscientious worker and a man with a heart of gold, giving of himself without stint and beloved by all with whom he came in contact. His church affiliation marked him as a kindly, gentle person who gave of himself completely. We feel honored that we have known and worked with him.

Wherefore, the Members of the Passaic County Medical Society resolve that by the passing of Dr. Vernalgia, the medical profession has lost a faithful member whose devotion to duty was outstanding and it directs that this tribute be spread on the minutes of the Passaic County Medical Society and a suitable copy be sent to Mrs. Vernaglia."

RESOLUTION ON THE DEATH OF DR SLOAN

Dr. Samuel L. Sloan, physician, surgeon, and beloved colleague, died suddenly on August 25, 1954, at his home. Although stricken with a severe coronary last year, he insisted upon resuming practice. His death occurred while so engaged.

Born May 15, 1893, Dr. Sloan was graduated from the Long Island Medical College in 1917. He was the second intern at the then recently opened Barnert Memorial Hospital and followed this with a surgical residency at St. Michael's Hospital in Newark.

His practice, since 1937, was limited to surgery and in 1951 he was made a Fellow of the American College of Surgeons.

At the time of his death, he had been continuously on the Staff of the Barnert Memorial Hospital for 35 years, as Intern, Associate in Gynecology and Associate in Surgery.

Dr. Sloan was a lover of nature, who enjoyed the simple things in life. He found pleasure and relaxation in long walks along country roads.

Whereas: God, in his wisdom, has seen fit to take from our midst, our colleague, Dr. Samuel L. Sloan, and

Whereas: in his passing, the Passaic County Medical Society has lost a valuable member and beloved physician, and

Whereas: the loss of Dr. Sloan will be sorely felt by all his friends and colleagues,

Be it therefore resolved: that the death of Dr. Sloan is noted with deep regret, and that our sympathy goes out to his family and friends, and Be it further resolved: that this resolution be inscribed in full in the minutes of this meeting and that a copy thereof be sent to his bereaved family.

At the conclusion of the meeting, refreshments were served with the assistance of hostesses from the Woman's Auxiliary.

The regular monthly meeting of the *Passaic County Medical Society* was held on Tuesday, November 16, 1954, at the Valley View Sanatorium. Dr. Leopold E. Thron, the president, presided.

A recommendation from the Committee on Constitution and By-Laws for amendment in Article VII, Section 3 of the By-Laws of this Society was accepted to read: "Article VII—Funds and Expenses. Section 3. Whenever the word "September" occurs, it shall be changed to "October"."

The following were elected to active membership: Charles A. Gibbons, Louis J. Spizziri, James R. Toombs—all of Paterson; elected to associate membership were Aaron W. Rosendale, Prospect Park and John C. Frommelt, Pompton Lakes.

Dr. A. Gerard Peters, Program Chairman introduced Alvan L. Barach, M.D., Clinical Professor of Medicine, Columbia University, who spoke on "Pulmonary Emphysema."

Dr. Homer H. Cherry, Superintendent of Valley View Sanatorium, gave a short talk about some unusual cases found among his patients. This was followed by a collation.

DAVID B. LEVINE, M.D.
Reporter

Somerset

A regular meeting of the *Somerset County Medical Society* was held on November 11, 1954. The meeting was called to order by the President, Dr. M. E. Tolomeo. There was an excellent attendance.

The meeting was held at the recently opened Somerset County Guidance Center in Somerville. Dr. William Boutelle, Psychiatrist at the Center, introduced Miss Sarah Eastman, Psychiatric Social Worker, who spoke on how the doctors in the community can use the services of the Center, and what constitutes a referral. She also outlined in detail the manner in which each referral is processed. Mr. Frank Haronian, psychologist, was then introduced and spoke on the theory behind projective technics. After a few closing remarks by Dr. Boutelle, the members were then invited to inspect the Guidance Center. The program was most interesting and enjoyed by all those present.

C. S. McKINLEY, M.D.
Reporter

Woman's Auxiliary • • •

We Can be Proud of Our A.M.E.F.

The American Medical Education Foundation was established in 1950 to help alleviate the financial crisis in medical schools. This problem, made more acute by the ever increasing costs in medical education, is still with us. However, we can point with pride to the progress of our A.M.E.F. at the national, state, and county levels, in raising funds voluntarily so that our medical schools will not have to seek federal aid and later be government controlled.

Each year the A.M.E.F. sets as its goal $2,000,000 to be solicited from members of the medical profession and medical societies. The Woman's Auxiliary to the A.M.A. has joined with its parent organization in helping to raise this fund. For the first time since its inception the A.M.E.F.'s income has passed the million dollar mark and it is steadily increasing. Of this amount the Woman's Auxiliary contributed $45,707 with 44 state auxiliaries participating. Our National Auxiliary donated $10,000. New Jersey, too, can be proud of its Auxiliary's part in this work. Every county, but one sent a contribution last year. Our state was credited with $1,879. Essex's magnificent contribution of $2.80 per capita won first place in the state, and Monmouth was second with $1.38. Six counties passed our minimum goal of one dollar per member.

Our success last year should be an inspiration for us to reach our objective again. What we accomplish will depend upon how much each member appreciates the need for the A.M.E.F. and what she contributes in time and dollars.

As we proceed with our task, let us remember the pledge that our Auxiliary made in 1951 in national convention to "give whole-hearted support to the program of the American Medical Education Foundation." Commenting on this our National Chairman, Mrs. Frank Gastineau, says: "Our Auxiliary has assumed part of the doctors' burden to help finance medical education. We will not only help our husbands, but we will understand and know each other better as we work together in our effort to make the United States a healthier and better place in which to live."

MRS. OSWALD R. CARLANDER

State Chairman

Auxiliary Report • • •

Essex

The Essex County Medical Society held a combined dinner meeting with the *Woman's Auxiliary* on Wednesday evening, October 13, 1954, at the Hotel Suburban, East Orange. Guest speaker was Msgr. John L. McNulty, president of Seton Hall University. His topic was, "The Seton Hall College of Medicine and Dentistry." Dr. Frank S. Forte, president of the Essex County Medical Society, introduced the president of the Woman's Auxiliary, Mrs. Philip R. D'Ambola. In behalf of the Auxiliary, Mrs. D'Ambola extended sincere best wishes to Dr. Forte for a successful administration. She then introduced the officers of the Auxiliary.

Mrs. Philip R. D'Ambola, presided at the luncheon-meeting on Monday, October 25 at Mayfair Farms, West Orange. Attendance was 121. Mrs. Harry E. DiGiacomo, program chairman, introduced Dr. Frank S. Forte, president of the Essex County Medical Society; Mrs. Paul E. Rauschenbach, president of the Woman's Auxiliary to The Medical Society of New Jersey; Mrs. Andrew Ruoff, Sr., president-elect; Dr. Ronald F. Buchan, second vice-president of the Academy of Medicine of New Jersey; and Mrs. Frank S. Forte.

Dr. Forte gave thanks to the Auxiliary for its cooperation in the work of the Essex County Medical Society. Dr. Buchan outlined the educational role of the Academy of Medicine of New Jersey. He praised the Auxiliary for its scholarships in nurses' training and its contributions to the homemakers' service of the Essex County Service to the Chronic Ill.

Mrs. Rauschenbach urged favorable action on the medical school referendum. She said that our state

has a large enough population to warrant two medical schools.

Mrs. D'Ambola reported that she attended, as an invited guest, the first council meeting of the Essex County Medical Society on September 21 at the home of the president, Dr. Frank S. Forte.

Mrs. Ralph Autorino announced that the Auxiliary had been presented a certificate of achievement from the Woman's Auxiliary to the A.M.A. This was for outstanding achievement in behalf of the A.M.E.F. last year during the chairmanship of Mrs. Autorino. Mrs. Frank S. Forte added that the State Auxiliary also had received a citation as a result of the Essex County A.M.E.F. project.

Mrs. Thomas Santoro, A.M.E.F. chairman, announced that a dessert-bridge will be held on February 11 at the Woman's Club of Orange.

Mrs. George Parell, Ways and Means Chairman, urged the women to attend the Chrysanthemum Ball on November 20 at the Military Park Hotel.

Mrs. Anthony Giannotto reported that the T.B. Seal Program will start with an opening luncheon on November 17.

The Auxiliary's Public Relations Day program will take place on March 16. Mrs. Frank Galioto announced the subject will be "School Health."

MRS. THOMAS A. MESSINA, Chairman
MRS. JOSEPH DI NORCIA, Co-Chairman
Press and Publicity

Book Reviews • • •

Many of the reviews in this section are prepared in cooperation with the Academy of Medicine of New Jersey.

Endemic Goiter: The Adaptation of Man to Iodine Deficiency. By John B. Stanbury, M.D., and others. Harvard University Monograph Number 12 in Medicine and Public Health. Pp. 209. Cambridge, Mass. 1954. ($4.00)

This is the result of an intensive scientific study of the endemic goiter problem in western Argentina. This region was selected because of the high incidence of endemic goiter there. The province of Mendoza, adjacent to Chile, is shielded from the sea coast by the Andean mountains. Its soil and vegetation are poor in iodine content.

This study, employing the most modern scientific methods was carried out by scientists from the Harvard University Department of Medicine and the Thyroid Clinic of the Massachusetts General Hospital. The Argentina scientific group included the medical staff of the Central Hospital of Mendoza working in cooperation with the Dean of the University of Cuyo and the Minister of Public Health. The study was initiated and completed before the use of iodized salt in the Mendoza province became mandatory in 1954.

The total number of patients in this study at the Central Hospital of Mendoza was 129; they were all euthyroid patients. A special group of nine cretins was added later, but the bulk of the book deals with the 129 patients, who were selected for this study from 1,117 patients with thyroid disease seeking medical help in the outpatient department of the Central Hospital of Mendoza. It has been estimated that in this large group 52 per cent had nodular goiter, 34 per cent diffuse enlargement and 5 per cent nodular goiter with hyperthyroidism.

The scientific studies were chiefly concerned with the pathways of iodine metabolism, such as the uptake and excretion of iodine, the effects of dessicated thyroid, the effects of large doses of iodine, the effect of administration of methimazole and thyrotropin on the metabolism of iodine.

This is a unique and interesting book for those interested in normal and pathologic functions of the thyroid gland and the theoretical aspects of the goiter problem.

RITA S. FINKLER, M.D.

Textbook of Pediatrics. By Waldo E. Nelson, M.D., With the Collaboration of seventy Contributors. 6th ed. Pp. 1501. Philadelphia, W. B. Saunders Co., 1954. ($15.00)

This is a superb pediatric textbook for students. Simplicity, quality and clarity of style, together with the use of many excellent illustrative tables have accomplished this objective. Sections on differential diagnosis and treatment throughout the book are slanted primarily for the student.

The sections designated "Psychologic Disorders" are as succinct as compatible with an understanding of the topics. But emphasis is often sacrificed in condensation. Because of this brevity of treatment of individual problems, some might prefer the chapter "Mental and Emotional Development" to be an integral part of the chapter on "Psychologic Disorders." When set apart as they

are, continuity between them is lost. This may cause confusion between simple behavior problems arising at a time compatible with normal mental and emotional development, and "Neurotic Traits and Psychosis" of an almost identical type occurring long past the period for their expected disappearance, as for example, enuresis.

The section on "Mental Deficiency" opens up an age old controversy by no means as clear cut in ethical concepts as indicated in the book. The statement that "sterilization represents an indispensable adjunct to a complete program of social care for the mentally defective" (p. 1138) leaves little free choice to the individual or the next of kin. Neither has it been pointed out to the student that religious concepts of the family cannot be completely ignored. Thus, if spiritual values have been completely forgotten in the consideration of a "complete program," the program seems less than complete to the reviewers. Also, if the problem was to be considered on an individual patient basis, with this text as the guide, some of the reasons mentioned under the title "Familial Mental Deficiency" (p. 1132) by the same author, could actually contraindicate sterilization as, for example, a "high grade moron female of childbearing age, who does, or will in the near future, live in the community under reasonable supervision." Thus, sterilization in a really "complete program" for such a woman might be contra-indicated on other than religious tenets. Ethically and legally it could lead to many nefarious practices.

The chapter on adolescence is a welcome addition to any book on pediatrics. This age group is usually a no-man's land between childhood and adulthood.

The cardiovascular system in general and the section on congenital heart disease in particular are well handled. The more usual types of congenital heart disease are brought up to date, with attention to cardiac catheterization and angiocardiography. Recognition is given to the less common and more atypical forms of the disease. For the treatment of congestive heart failure, the author prefers mercurial diuretics, whereas others abstain from their use because of the renal tubular damage seen at autopsy, without corresponding clinical or laboratory findings. Also, since publication, a newer glycoside, digoxin, safer because of its rapid excretion, has been made available.

Infectious diseases and their practical differential diagnosis by clinical and laboratory procedures are outlined in table form most clearly. Quarantine regulations, tested, though not enacted into law in many states, are certainly what all pediatricians would recommend. The selective properties of the important microbial agent are also clearly outlined.

Growth and development tables of precentiles for weight, height and other growth standards as well as all of those included in the appendix, could easily be placed on the walls of any practitioner's office for ready, practical reference.

EDWARD P. DUFFY, JR., M.D.
MILTON PRYSTOWSKY, M.D.

Arthritis and Rheumatism: The Diseases and Their Treatment. By Charles LeRoy Steinberg, M.D. With five contributors. Pp. 326. New York, Springer Publishing Company, 1954. ($10.00)

The author's purpose is to guide the physician in the everyday responsibilities for the care of the rheumatic patients. In this he has succeeded by writing a concise book covering the major forms of the rheumatic diseases, as well as the related conditions such as collagen diseases. There is an excellent section on basic physiology as well as the orthopedic and rehabilitation phases of rheumatic diseases.

Treatment is discussed in a simplified form so as to eliminate the confusion of multiple forms of therapy. However, there is not enough emphasis on the diseases most seen by the physician such as osteo-arthritis and the vast group of fibrositic diseases. In a simplified book such as this these diseases might have been expanded at the expense of more complicated discussions and rarer syndromes.

This book will serve its purpose in a clearer approach by simplification. However one also feels the loss of certain essentials by the oversimplification of the discussion of the diseases *per se*. In spite of this, I recommend this book as a useful adjunct for the general practitioner faced with the treatment of this large group of often frustrating diseases.

IRVING L. SPERLING, M.D.

Electrocardiography. By E. Grey Dimond, M.D. Pp. 261. St. Louis, C. V. Mosby Co., 1954. ($14.00)

This book offers a practical presentation of electrocardiography for the general physician. Dr. Dimond gives an outline of the instruments used, the technical procedures employed, and the organization of an electrocardiographic department. Basic concepts of electrocardiography are briefly reviewed. Normal and abnormal electrocardiographic findings are presented and discussed in terms of current vector theory. One chapter is devoted to the diagnosis of cardiac arrhythmias and another to congenital heart disease. The last chapter is a collection of letters from authorities throughout the United States, emphasizing the limitations of electrocardiographic diagnosis in left ventricular hypertrophy. These letters attest the fact that numerous moot points are met even in expert judgments on electrocardiographic diagnosis.

The illustrations and diagrams are of good quality. The tracings, graphic records, and general format of the volume constitute an elementary atlas on electrocardiography. The book should be useful to those teaching the subject, and it compares favorably with others in its field. It is recommended to those wishing to learn the essentials of electrocardiography.

FRED B. ROGERS, M.D.

Emergency Treatment and Management. By Thos. Flint, M.D. Pp. 303. Philadelphia, W. B. Saunders Co., 1954. ($5.75)

This volume could be very useful in situations where emergencies gravitate. The emergency room of the hospital, for example, would do well to have this book on its shelf. For the management of common day-to-day emergencies, this book would seldom be needed. But, where else in a hurry could you find the treatment for Gila monster bites?

Written in outline form, it runs alphabetically from "Abdominal Pain" to "Wartime Emergencies." There are cross references throughout the text to avoid repetition. (This reviewer, in sampling the accuracy of a few of such cross references, found one to be in error—under Topic 22, Bites). There is a valuable section of 110 pages on Poisons, from acetanilid to zygadenus, and on poisonous plants from aloes to yew. Other sections give information on such things as "Drug Dosage in Children," "Blood Alcohol Tests," and "Rape or Criminal Assaut, Examination for." There are tables of weight equivalents and comparative thermometer readings, centigrade and fahrenheit. Finally, there is an important section on the medico-legal aspects of treating emergencies.

A critical review of each item would lead to criticism as to the method of treating one or another condition. But, there is frequently room for difference in opinion as to which drug should be chosen in preference to another, or which method should be used. This does not destroy an otherwise useful addition to the medical literature.

HARVEY E. NUSSBAUM, M.D.

The Concept of Schizophrenia. W. F. McAuley, M.D. New York 1954. The Philosophical Library. Pp. 145. ($3.75)

Eight pages out of these 145 are devoted to treatment. Lobotomy and insulin are the only treatment methods discussed. There is little or no mention of electroshock, occupational therapy, total push, psychotherapy or any other modality. On the other hand, 13 pages are devoted to "heredity" as a factor in schizophrenia, but no dispositive conclusion is reached. The book ambles along amiably, reviewing dynamic concepts, social factors, neurophysiologic factors and diagnostic technics, but nowhere coming to crisp conclusions. There is also a very inconclusive chapter which is, somewhat bewilderingly, called "conclusions." In general, the author's position is that schizophrenia is due to social factors outside the patient. Early diagnosis, says Dr. McAuley, in a flash of originality, early diagnosis is important so that vigorous treatment may be applied.

He forgets to outline the vigorous treatment.

HERBERT BOEHM, M.D.

Scourge of the Swastika. By Lord Russell of Liverpool. 1954, New York, Philosophical Library. Pp. 259 with 35 unpleasant illustrations. ($4.50)

Why the publishers sent this for review to a medical journal is not made clear. Perhaps because the revolting barbarities of the Nazis suggested some serious emotional sickness. This is a heaviiy documented study of the way in which the Germans put to death some 12 million women, men and children, not in the heat of battle or passion but with cold deliberateness. In the current wave of international good will towards our recent enemies, it is so easy to forget that here, as a matter of national policy, a people joined (apparently with sadistic enthusiasm) in the butchery of innocent victims, in shooting down survivors of ship-torpedoing, in the dehumanization of concentration camp inmates, in the revolting exploitation of slave labor and in a hundred other nauseating and almost incredible examples of cruelty. It is, perhaps, not good that we be allowed to forget.

As I read the book, my radio announces the Pact of London. It is hailed, says the commentator, as the greatest diplomatic achievement since — (I missed this, was it "since Munich"?). Once again a German Army will march: a half million strong to start with. Cries of joy, the announcer says, greeted the signing of the Pact.

This is where we came in last time.

VICTOR HUBERMAN, M.D.

Fundamentals of Anesthesia. Prepared under the editorial direction of the Consultant Committee for Revision of Fundamentals of Anesthesia. Council on Pharmacy and Chemistry of the American Medical Association. 3d. ed. Pp. 279. Phila., W. B. Saunders Co., 1954. ($6.00)

The justified and increasing popularity of this text with the ever increasing development of new technics and new anesthetics and depressant drugs necessitated this thoroughly revised edition. The material for this volume has been obtained from 16 American authorities in anesthesia and from the previous edition of the book. The unique selection of material and its arrangement makes it difficult to credit any chapter to a specific author.

This is a guide to medical students, residents in anesthesia and to the occasional anesthetist in the teaching of the basic principles of anesthesiology. It provides a brief but comprehensive outline of many phases of modern anesthesia. The reader is not burdened with experimental approaches nor with technics which have not been extensively used.

There are new chapters on obstetrical anesthesia and analgesia, pediatric anesthesia, geriatric anesthesia, and some new concepts in inhalation therapy. The text is well printed on good stock. Illustrations are simple but very well done and to the point.

J. D. BARBELLA, M.D.

TUBERCULOSIS *Abstracts*

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Vol. XXVIII January, 1955 No. 1

An Experience with the Large Routine Chest Film in a Rural Hospital

By J. W. Boyd, M.D., The Ohio State Medical Journal, September, 1954.

In this era in which the lay press and various medical groups are persistently advocating routine, periodical physical examinations which include a chest roentgenogram the physician has an excellent opportunity to discover early lesions. Every physician knows that the best chances to cure a disease come in its early symptomless phase, when it usually responds to treatment. This is particularly true in tuberculosis and lung malignancy.

By definition routine chest examinations are those which are conducted to screen persons with abnormal changes of the chest from persons with normal chests. The patients with advanced disease concern us less than those with minimal disease. The former group will seek medical advice because of the distressing symptoms, but the latter will walk the streets with a minimal lesion, unknowingly jeopardizing their own lives and the lives of others. For mass chest surveys the 35 mm., 70 mm., or the four by ten stereoscopic films are available, as well as the full size film or 14 by 17 inch. Survey chest x-rays in hospitals or in the general population are approved as a screening device if so conducted that well-qualified professional and technical personnel are utilized and sincere efforts are made to follow-up the positive individuals properly.

Finding a chest lesion is only the beginning of the screening process. It is often difficult to differentiate tuberculosis from lung malignancy both clinically and radiographically. Any patient who presents an abnormal shadow on the screening film should have a more complete x-ray examination, including fluoroscopy, lateral projections and, many times, oblique projections. Tuberculin tests and sputum and gastric examinations for tubercle bacilli are essential. Cytologic examinations and bronchoscopy with biopsy should be done if indicated.

It should be emphasized that the admission chest film for the most part is a screening process and not diagnostic. Since the microfilm has been in use, numerous abnormalities of the heart and great vessels have been discovered which may have otherwise been overlooked.

In November 1952 the hospital board, administrator and medical staff of Detwiler Memorial Hospital, Wauseon, Ohio, decided to do routine admission chest films on all patients over 12 years of age, admitted for a period of 24 hours or more. Only one examination would be done on a patient in a six-month period regardless of the number of admissions of that patient. As the hospital has only 60 beds with approximately 3000 admissions yearly, the installation of a microfilm unit was impractical. It was agreed to use the large film or 14 by 17 inch. The fee charged was to be large enough to cover the expense of the radiology department but reasonable so that the patients would not be discouraged from having the examination.

An interested and educated staff is a necessity if this program is to be successful. It is equally important that all of the hospital personnel understand the purpose of and cooperate in the program. The examination was not to be mandatory, but each staff physician was to explain to his patient its value and availability. Obviously a perfect record was not expected, but it is estimated that at least 95 per cent of the patients over 12 years of age obtained the chest roentgenograms.

The chest film should be taken as soon as possible after admission, in order to protect the hospital personnel and to assure effective follow-up if a lesion is discovered. The procedure increases in value if the recommendations of the roentgenologist for further investigation are followed and a final diagnosis is established.

Statistical studies have shown that the incidence of tuberculosis is higher in patients in general hospitals than in the general population. It has also been shown that there is more tuberculosis among pregnant women than in the general population. It is often difficult to obtain an admission film on an obstetrical case. Therefore, it is advised that maternity cases be referred to the hospital for a chest film during pregnancy, preferably during the last trimester.

In a 12-month period a total of 1205 admission films were taken at Detwiler Hospital. The films classed as "routine" do not include patients with chest complaints or patients suspected of a chest disease. Of the 1205 films taken, 133 or 11 per cent, presented some type of significant abnormality or finding.

Analysis of Large Admission Chest Films Showing Significant Findings

Significant findings	Number	Per cent distribution
Total	133	100
Abnormalities of the heart and great vessels	61	46
Rib abnormalities (all were cervical ribs except metastatic destruction in one case)	11	8
Diaphragm abnormalities	5	4
Lung disease—includes pneumonia, tuberculosis, bronchiectasis, fibrosis due to infection or occupation	50	38
Neoplasms	6	5

It must be stressed that the figures in the table represent roentgen diagnoses only and that only a small number of these have been proven to date. The first group of figures is most striking. The abnormalities of the cardiovascular system consisted largely of enlarged hearts or a cardiac configuration suggesting rheumatic heart disease. All films were taken at a 72 inch distance so that these were readily recognized. The study, although of a small number of cases, shows a much larger incidence of abnormal heart silhouettes than has been reported in surveys in which the small microfilm was used.

Several reported studies of surveys of admissions to general hospitals have shown that a routine chest x-ray discloses a higher percentage of abnormalities than any other single routine hospital laboratory examination. There is also a definite increase in the number of lesions detected on the large film (14 by 17) as compared to the microfilm. However, the microfilm is still undoubtedly the most satisfactory and economical method in large screening processes. In hospital screening the advantages of the large film must be considered. It is felt that the size of the hospital makes no difference.

A community-wide chest x-ray program involves large numbers of people and organizations. The community-wide survey also represents a unique opportunity for a community to rethink its tuberculosis and cancer control program. It can be the starting point for an all-out effort to eliminate tuberculosis and to conquer lung malignancy. Its success depends upon the breadth of understanding and exchange of ideas which the survey itself engenders in those concerned with its management.

In the hospital program the cooperation of all hospital personnel cannot be overemphasized particularly that of the medical staff. The investment of a few minutes of the time of the physician in explaining to the patient about the value of routine chest film and the expenditure of a relatively small sum of money on the part of the patient, may pay great dividends in years of life.

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*Swartout, R., III, and Gunther, K.: "Dizziness:" Vertigo and Syncope, GP *8*:35 (Nov.) 1953.

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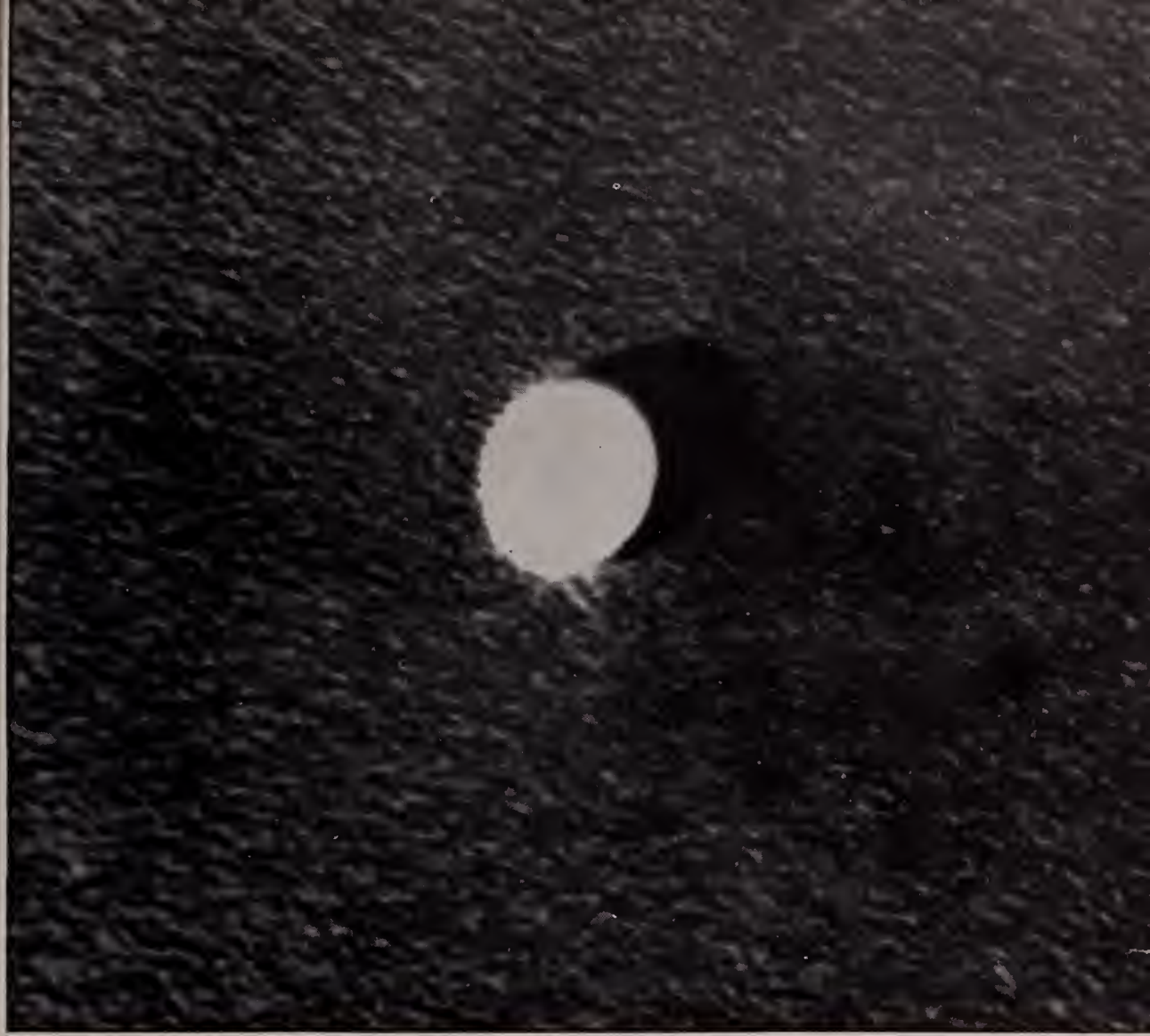

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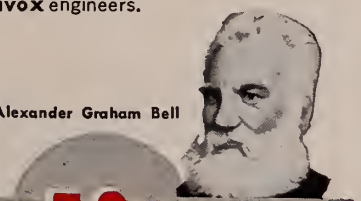

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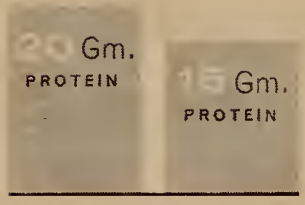

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1. Jeans, P. C., in A.M.A. Handbook of Nutrition, Philadelphia, Blakiston, 1951, pp. 275-298. 2. Stare, F. J., and Davidson, C. S., in The Proteins, American Medical Association, 1945.

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OF

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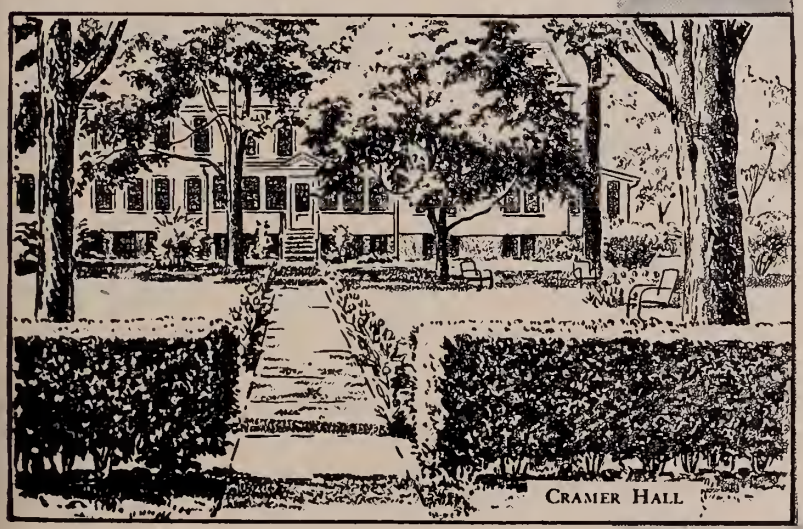

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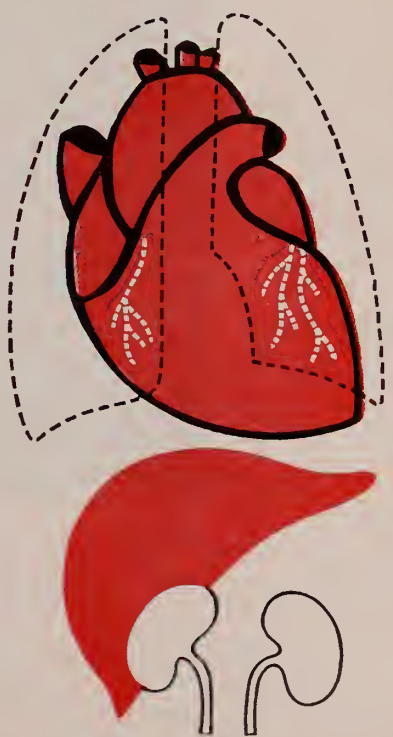

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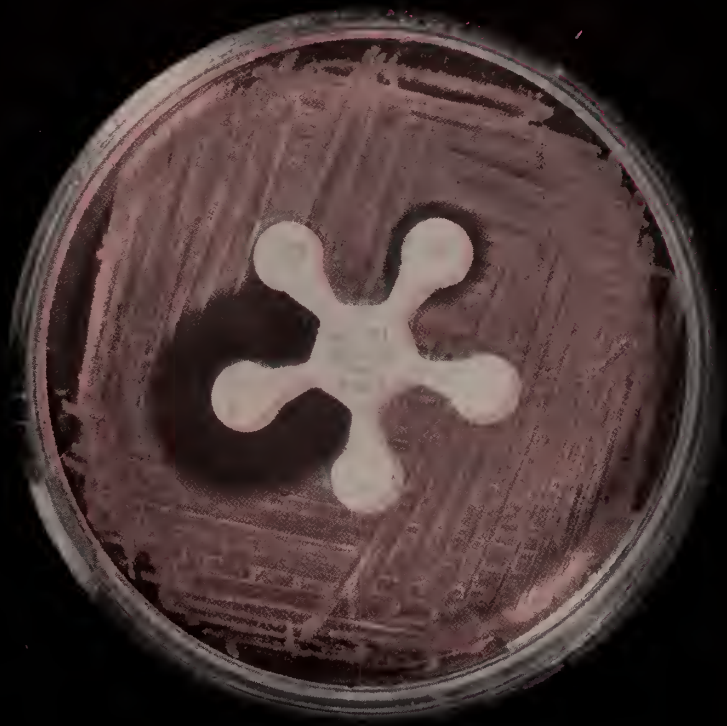

This is an actual strain of *staphylococcus aureus*, isolated from a 5-week-old infant. Note extreme sensitivity of the organism to ERYTHROCIN—although it easily resists penicillin and three broad-spectrum antibiotics. This organism may be associated with *sinusitis . . . otitis media . . . tonsillitis . . . abscess . . . bronchopneumonia . . . empyema . . . carbuncle . . . pyoderma . . . bronchiectasis . . . furunculosis . . . pharyngitis . . . septicemia . . .* and *tracheobronchitis.*

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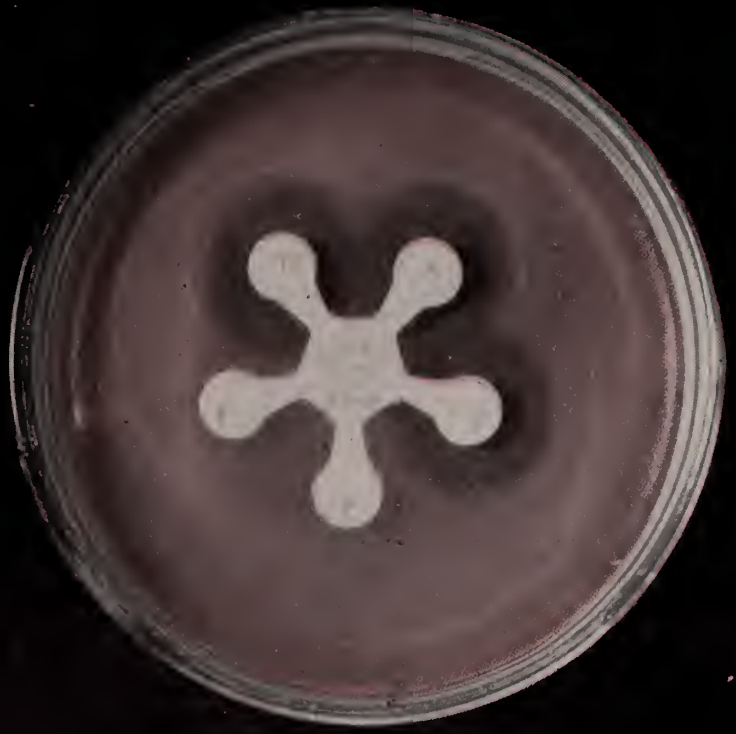

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1. American Medical Association: New and Nonofficial Remedies. J. B. Lippincott Co., Philadelphia, 1954, p. 147.

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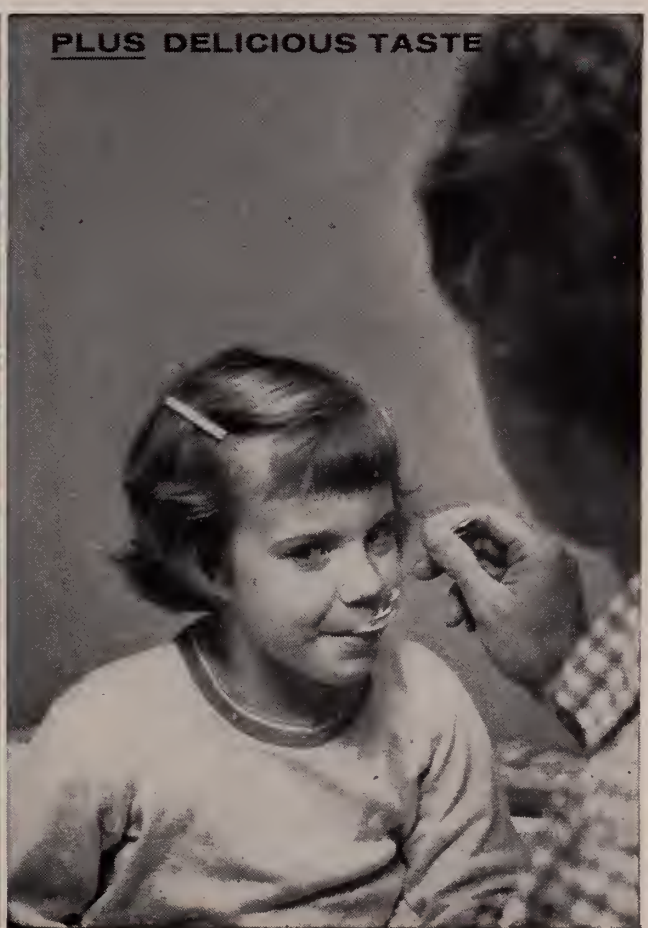

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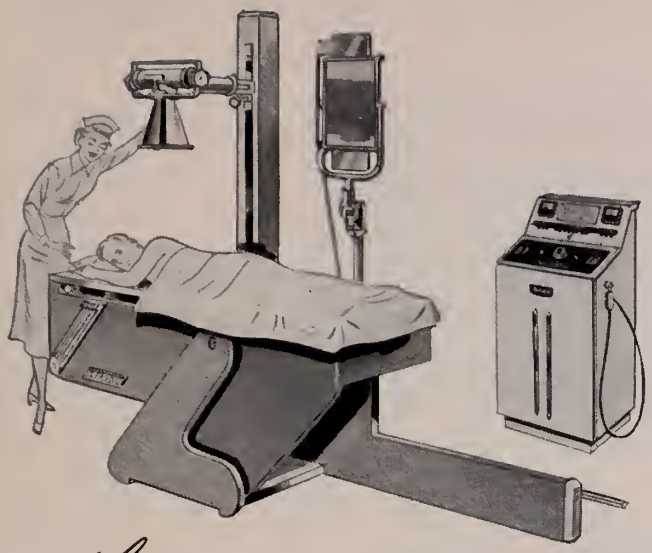

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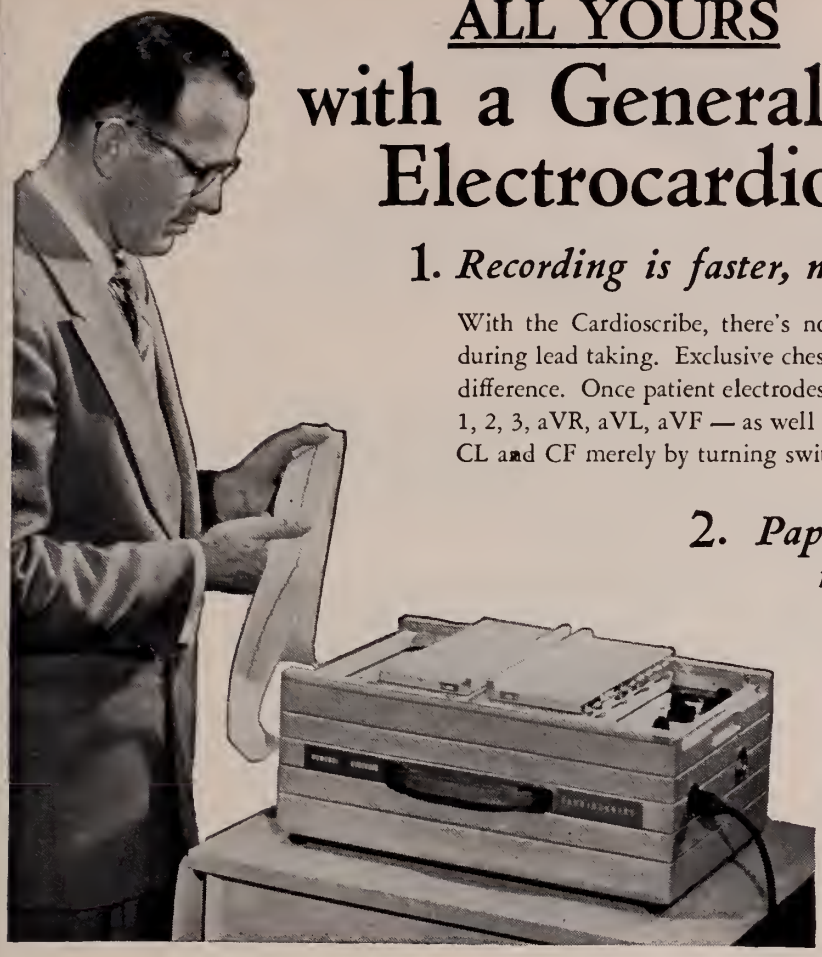

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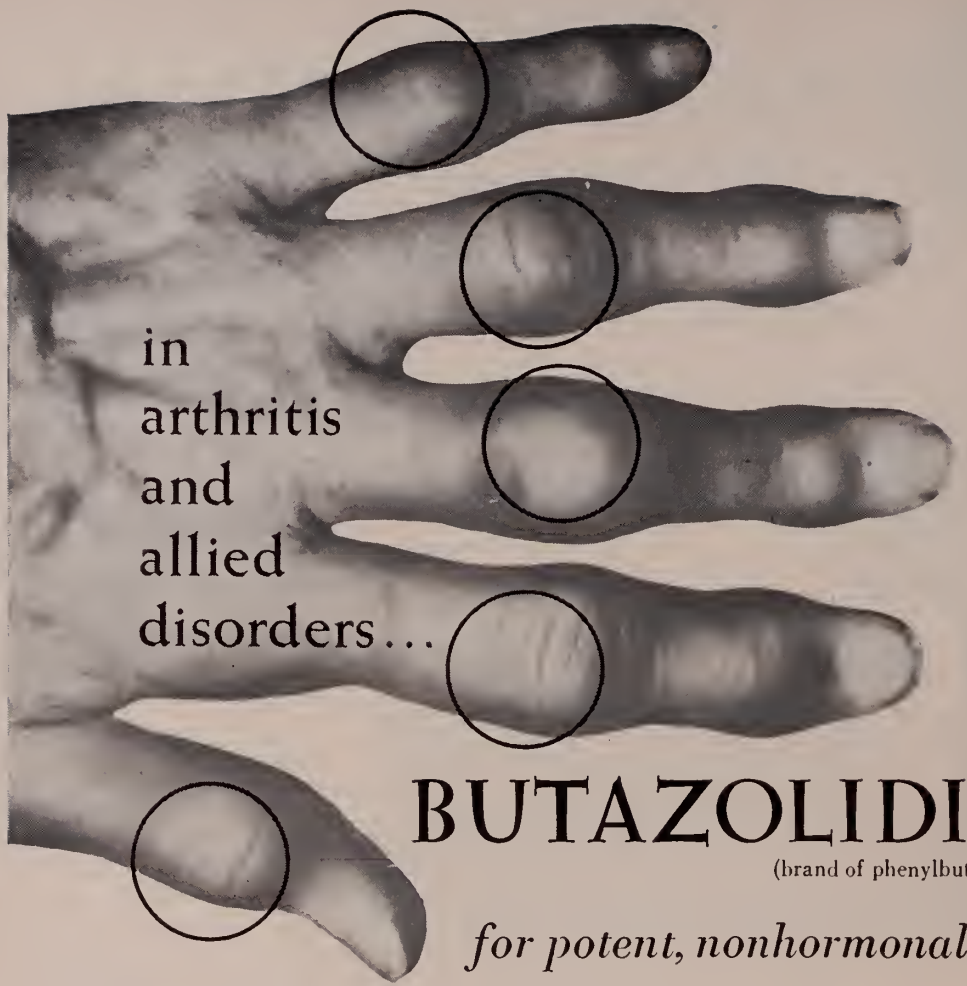

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Editorials • • •

Family Medicine for Medical Students

Medical education — like all education — comes in for a lot of brickbats these days. One of the current criticisms is that the medical student never gets to see a patient in his normal milieu, but only in the highly artificial environment of the hospital or clinic. This leads the student to isolate the illness from its social background. It makes him forget that patients have families. It leads to such absurdities as recommending that an arthritic and widowed scrub woman treat her arthritis by basking for the winter in Florida's sun and sand. And it leads away from "family practice" even though one of the avowed aims of the medical school is to train family doctors, rather than specialists.

It is heartening to see that at least one medical school is doing something about it. Vanderbilt University's School of Medicine in Nashville has initiated a four year program in which medical students make regular visits to the homes of patients. They encourage the student to act as a family health advisor to a group of families. They learn the ministry of listening, the curious healing force that flows out of the relationship when the doctor will listen patiently and sympathetically. They do not see disease tied up into neat packages with all the "extraneous" or nonmedical aspects trimmed off. Instead they see disease as part of a total personality and see that total person as part of a family, of a neighborhood, of a community. Which is as it should be.

Every one talks about the "social" aspect of disease, about disease being a social phenomenon, as well as a biological one. Every one talks about the importance of persuading young physicians to become true family doctors. But no one *does* anything about this. Well, almost no one. In Nashville, they *do* do something about it.

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The New Bigotry

Practically everybody considers himself a "liberal" and practically every liberal condemns bigotry and prejudice. This phrase, "bigotry and prejudice," one must assume, refers to a general condemnation of an entire class based on a preconviction that the group is inherently evil. And no liberal would be caught entertaining any such "prejudgments." Not against any ethnic or religious group that is. But there is one field where the liberal may be prejudiced to his heart's content. That is in distrusting physicians. Here he may accept as an article of faith, the thesis that physicians are inherently greedy and that all their opinions and actions are based on self-interest in the most unenlightened sense of that term. Indeed, it is even "smart" for the liberal to cling to such notions. Typically, he will reject the possibility that physicians, individually or in groups, are motivated by any honest dedication to public welfare.

If the doctor for himself or as spokesman for a medical society—if the doctor says that compulsory health insurance leads to second rate medical care, the prejudged answer snaps back: the doctor says that because he is prosperous under this system and doesn't want to reduce his income. If it is pointed out that the destruction of free choice removes something fine (and something therapeutically useful), the answer is that this is a myth dreamed up by physicians to protect their own interests. Indeed, the "liberal" in such a context will not even concede that the physician might be honestly mistaken in his attitude. He will have it that the doctor takes his position out of greed, and deny that any physician who opposes expanding health insurance could possibly be honorably motivated. If you point out that physicians are forever doing things against their own interests, you get laughed at. If you dare mention the vast amount of gratis work done by every M.D., you are told that this is being patronizing, or that this is simply the result of a bad conscience. If you repeat stories of personal devotion, hours of unremitting and unrewarded vigil, or of personal exposure, you are told that this is pure corn.

No example of heroism, sacrifice, or selfless dedication to patients, will make any difference. For the critic has already made up his mind. He has judged—indeed he has prejudged. And in the purest sense of the word, this is "prejudice." But it is the new prejudice, the permitted prejudice, even perhaps the fashionable prejudice. It is, furthermore, the safe prejudice, for the critics can be sure that no matter how hostile their tone, how unfair their condemnation, there can be no retaliation. For medicine's indispensable benefits are for friend and foe alike.

Progress Note

A recently developed body armor is recommended for civilian use. Writing in the August 21 (1954) *Journal* of the American Medical Association, Holmers, Enos and Beyer report that such armor was found effective in reducing casualties in Korea. It is now urged that it be worn by civilians to shield against injury from "flying debris such as masonry, metal or glass," which is expected during bomb raids on cities.

Time was when shield and armor were the insignia of the gentleman. Since those dreadful dark ages, we have, of course, made much progress. Now the armor is of nylon. And—a note on the extension of democracy—wearing of the armor is no longer the exclusive prerogative of the well-born.

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Diabetic Nephropathy*

Thirty-two cases of diabetic nephropathy are analyzed and compared to a control series of renally clear diabetics. The possibility that emotional components play a significant role is presented. Suggestions are made as to the factors which seem to determine why only certain diabetics suffer renal complications.

THE coexistence of kidney lesions with diabetes mellitus received comparatively little attention up to 1936. The hyalin degeneration of the epithelial cells of Henle's loop, known as Armanni's lesion, was described many years ago. Deposit of glycogen in the kidneys has been well known for years. Interstitial and parenchymatous nephritis was described incidental to diabetes mellitus. Volhard recognized the syndrome of albuminuria, retinitis, and hypertension in diabetics in 1931. In Joslin's[1] case reports from 1930 to 1940 covering 5669 diabetics 4½ per cent of the deaths were ascribed to nephropathy. At the Newark City Hospital (Martland Medical Center) 2328 diabetic admissions included 3 per cent with the diagnosis of various nephropathies between 1929 and 1941. Between 1947 and 1951, of 1288 diabetic admissions 2½ per cent were considered diabetic nephropathies, and were specifically designated with the clinical diagnosis of intercapillary glomerulosclerosis.

In 1936 Kimmelstiel and Wilson[2] described eight cases, seven of which were associated clinically with diabetes mellitus, nephrotic edema, albuminuria, hypertension and renal decompensation. The glomeruli showed intercapillary hyalinization which was interpreted as arising from the intercapillary connective tissue. The hyalin seemed to be confined to the center of the lobule and the number of capillaries was reduced to the extent that there seemed to be only a ring of capillaries around the central hyalin masses. The basement membranes were not considered characteristic. In addition, arteriolar sclerosis and fatty degeneration of the afferent arterioles was present but apparently distinct from that in the glomeruli. Lipoid substances were found between the basement membrane and the epithelium of Bowman's capsule with narrowing of the subcapsular space. All the glomeruli were

*This paper was presented at the Annual Meeting of The Medical Society of New Jersey in Atlantic City, on May 17, 1954. It is from the Martland Medical Center in Newark, the General Hospital in East Orange and St. Michael's Hospital in Newark.

found to be diffusely affected. Tubular changes in these cases were judged to be different than in lipoid nephrosis but were characterized by a striking deposit of fat and doubly refractive lipoid in the tubules. These findings were considered sufficiently characteristic to warrant the designation of intercapillary glomerulosclerosis.

The common *etiology* of this lesion and syndrome with other arteriosclerotic changes in diabetics is intimated by many authors.[4,3,8] The lesion is rarely found in nondiabetics, but it may be present without the clinical syndrome. It shows an increased incidence with the aging process.[12] Because the lesion seems to precede the clinical picture, a causal relationship was considered reasonable.[9] The clinical syndrome has been associated with diabetes mellitus. Evidence of the development of the lesions during later years of diabetes mellitus is furnished by Derow [18] in a case in which a kidney was removed four years before the death of the patient. This kidney showed no glomerulosclerosis. The other kidney at autopsy showed extensive lesions.

If the process of intercapillary glomerulosclerosis is bound up with other atherosclerotic changes, hyperglycemia associated with hyperlipemia [21] may have some bearing on the incidence of the Kimmelstiel-Wilson lesions in poorly controlled cases. Too many steps are missing in the definite proof of this thesis. However, there is some evidence that the hyalin fibrinoid lesions of the glomeruli are similar to those found in arteriolar hyalin sclerosis.[35]

Wilson, Root, and Marble [25] found that diabetic nephropathy, a term which they thought to be preferable for its conciseness, did not occur in patients who used insulin daily, careful measurement of a planned diet, and daily urine tests with adjustment of insulin and diet to secure sugar free specimens. Only 37 of 247 of their juvenile patients were able and willing to undergo so rigid a discipline to fulfill these criteria. That hyperglycemia *per se* is damaging to the kidneys, has not been established, Recently several reports have suggested that certain lipids,[30] glucosamids and other substances [31] that increase with the blood sugar may be damaging. Differential stains in the hands of various authors have "established" one or another of these substances as the extraneous material that is deposited in the renal glomeruli in the Kimmelstiel-Wilson lesion. These reports need further confirmation.

Certain additional pathologic criteria were established for the identification of the Kimmelstiel-Wilson lesion.[3,6,10] The most recently stressed is the finding of lipid substances [26] in the glomeruli. Tubular changes were most prominent in diabetics who died in coma.[5] Typical glomerular lesions were also found in pyelonephritis [11] and in a high proportion of the cases of necrotizing papillitis.[32] The advanced and more diffuse lesions are said by some authors [12] to occur only in diabetics, but it is definitely pointed out by others that even the characteristic lesions may be seen in glomerular nephritis with diabetes [6,11] and have been seen in acute streptococcal infection in a diabetic.[7]

Characteristic lesions of intercapillary glomerulosclerosis have been observed in the course of experimental diabetes. Lukens and Dohan [14] observed glomerulosclerosis in the kidneys of a dog with experimental pituitary diabetes of five years' duration. This was not a general finding in similar dogs. Goodman [24] quotes other authors who produced Kimmelsteil-Wilson lesions and retinopathy in alloxinized diabetic rabbits with the use of ACTH and cortisone. This is reminiscent of some of Selye's experiments and may serve to emphasize the role of stress for which the authors of this article will present clinical evidence.

CLINICAL SIGNS

The clinical signs of nephropathy in diabetics are commonly felt to be albuminuria, hypertension, retinitis, edema and anemia. Not all of these need be present in one case. Albuminuria is the earliest and most common finding, but need not necessarily be present.

Or, it may be the only finding for many years.[3] Hypertension may be noted at the onset of the diabetes. This occurred in one of our cases. The hypertension may be lowered by intercurrent myocardial infarction or pulmonary tuberculosis,[3] or by left sided heart failure. Retinitis is the only lesion of vessels that may be directly visualized in a live patient. It may be an even better sentinel sign of the glomerular degenerative process than albuminuria, which occurs often only after severe glomerular damage. Current research[33] may confirm this concept, although it deals primarily with vascular changes in the bulbar conjunctiva.

There is an inverse ratio between the amount of edema and the serum albumin.[3] The terminal edema is refractive to a salt poor diet and mercurial diuretics. In one of our cases it was equally refractive to blood transfusion, serum albumin and Dextran® infusions. In the earlier stages in one case and in another fairly well along in the disease, among our cases, the rice diet was singularly successful in combatting the edema both of the body generally and the retina in particular, with resultant marked improvement of vision out of proportion to other retinal changes. Some have thought that the early development of nephrotic edema is more likely in the young diabetics.

Actual improvement of the diabetes, evidenced both by aglycosuria and lowered blood sugars with decreased insulin requirements, has been mentioned by many authors. It was intimated by Forsham[23] that this might be due to inability of the kidney to perform its implied function of inactivating insulin. Terminally the toxic decrease of appetite incident to uremia may produce aglycosuria; but in these cases the blood reducing substances may rise with nitrogen retention. These are often terminal phenomena along with the extremely refractory anemia.

The laboratory findings aside from the proteinuria include: elevation of the blood nonprotein nitrogen, albumin globulin ratio reversal, changed electrophoretic patterns[22] and hypercholesteremia. Azotemia is a relatively late finding. There is a loss of concentrating power of the kidneys. In studies on kidney function[15] in diabetic nephropathy both tubular excretory capacity, measured with diodrast and glomerular filtration rate, measured by sodium thiosulfate excretion, were equally reduced. This resembles the nephrotic stage of glomerular nephritis and speaks against glomerular tubular imbalance as the cause of the edema. Malignant hypertension as a cause of the retinopathy found might, therefore, be ruled out by a low filtration rate, since in uncomplicated malignant hypertension filtration rate is increased.[15] Some authors[16] suggest that the proteinuria in diabetics may be characterized by an albumin associated with a carbohydrate or glycuronic acid fraction. Anisotropic lipoid cells or casts are a constant finding, best preserved in fresh acid urine and found best in twelve hour urine concentrates. The details and significance of these findings are stressed by Ryfkin[28] and Leiter.

DIAGNOSIS

THE likelihood of diagnosis of the syndrome of intercapillary glomerulosclerosis coincidental to the clinical syndrome is still being discussed. Tollman and Kirk[5] did not find the vascular changes in the kidneys consistent with any particular clinical course. Others[20] believed the correlation between clinical and pathologic findings to be a matter of chance. The diagnosis of diabetes itself may be missed because of the "high renal threshold" to glucose.[13] Latent diabetes may account for finding the lesions in aglycosuric cases.[17] The severe extensive nodular lesions seem to show a more consistent relationship with the clinical syndrome but are not necessarily associated with the severity of the diabetes.[17] Bell[29] feels that intercapillary glomerulosclerosis may be reasonably diagnosed in a diabetic with renal insufficiency not due to pyelonephritis or hydronephrosis. The elements of the clinical syndrome are more indicative of the typical lesions in the kidneys under the age of fifty. *Differential diagnosis* must be made, following the above criteria, from chronic glomerulonephritis, hypertensive vascular disease, amyloidosis, nephrosis and thrombosis of the renal vessels.

PROGNOSIS

THE average length of life following onset of the clinical syndrome is four to five years. Various elements of the syndrome may be consistent with up to twenty years of life. The dire prognosis of Fanconi[19] with reference to the appearance of the syndrome in diabetics is not generally shared. Of 136 diabetic children treated by him only 87 reached adult life. Sixteen years after the onset of diabetes, not one single patient was found free of nephropathy. He said that these results may have been due to the fruit, vegetable and low protein diet used in his clinic or to the Swiss tendency to thyroid deficiency. Death is common in uremia, but may be also due to cardiac failure, coronary thrombosis or cerebrovascular thrombosis. Terminal general anasarca is a usual finding.

ANALYSIS OF CASES

THE object of our study was to summarize the pertinent findings in some cases of diabetic nephropathy. Without special regard to the pathologic lesions, a purely clinical criterion was used for the selection of the cases. Diabetics were chosen who exhibited albuminuria, hypertension, retinitis, and edema or any combination of at least two of these signs. Thirty-two cases were collected by the authors from their private practices and clinics. Of these, many were treated at hospitals including Martland Medical Center, Newark Presbyterian Hospital and St. Mary's Hospital, Orange, N. J. Twenty are still under observation. Twelve have died. Thirty-three cases were selected from the practice of one of us as a control series. The controls have been diabetic for an average of 23 years with a range of 13 to 40 years. Eleven of the 33 cases have had diabetes for 25 years or more. All were insulin treated. The average duration of the diabetes of the juveniles in the control series is 21 years. Six of the seven juveniles were judged to be under fair to poor control.

Our data compares generally with the literature already cited. No study of the doubly refractive lipoid bodies in the urine was done. There were several interesting features that are not widely noted in previous reports. Besides the edema, the anemia and decrease in insulin requirements were judged to be primarily terminal phenomena. Peripheral vascular disease as manifested by "rest cramps" in the legs, ulcers of the feet, or x-ray evidence of vascular sclerosis was evident in half our cases. This is not surprising considering the possible etiology of the glomerular lesions in common with generalized vascular degenerative processes. Twenty-five per cent of the patients had some manifestations of neuritis, including three who had a particularly severe and diffuse form akin to diabetic tabes. Two made nearly complete recovery from neuritic manifestations. One suffered atrophy of both legs. Two had elevated spinal fluid protein. Nocturnal and prolonged intermittent diarrhea was present in three. In one case of prolonged intermittent diarrhea, albuminuria and edema with occasional and finally persistent low blood proteins continued for about fifteen years. The diagnosis of a "sprue-like-syndrome" was entertained and might have been incidental to the autopsy findings of the Kimmelstiel-Wilson lesions and two areas of myocardial infarction. Red blood cells and casts were found in some of these cases in relatively small numbers and there was one incident of gross hematuria in an otherwise clinically typical case. Unfortunately, no autopsy was obtained in that case, but the hematuria occurred many years before the death of the patient.

Two cases ran the unusually rapid course of six and seven years from the onset of diabetes to death after the complete development of the diabetic nephropathy syndrome. One of these was confirmed by autopsy. The effect of good carbohydrate balance and the presence of frequent acidosis (which were our criteria of good control) were somewhat difficult to evaluate. Less than 30 per cent of our nephropathies were considered under good control as judged by the failure to metabolize 150 Grams of carbohydrate daily and by the incidence of acidosis. This might be interpreted as confirming the results of Wilson[25] *et al.;* but in our control series with its long average dura-

Diabetes Mellitus	With Nephropathy				Without Nepropathy Controls	
	Living		Died			
	No.	Per Cent	No.	Per Cent	No.	Per Cent*
Number	20	100	12	100	33	100
Male	13	65	3	25	13	40
Female	7	35	9	75	20	60
Age of Onset of Diabetes						
Juveniles	2	10	3	25	7	21
16 to 40	11	55	5	40	13	39½
Over 40	7	35	4	35	13	39½
Duration of Diabetes in years before first signs of Nephropathy	12 (3 to 20)		8.8 (4 to 16)		——	
General Carbohydrate Balance						
Good	7	35	3	25	17	52
Questionable	5	25	2	16.6	0	0
Poor	8	40	7	58.4	16	48
Decreasing Insulin Requirement	4	20	6	50	0	0
Clinical Manifestations of Nephropathy						
Proteinuria	19	95	12	100	0	0
Retinitis	19	95	12	100	1	3
Hypertension	13	65	10	83.3	2	6
Edema	11	55	10	83.3	0	0
Anemia	2	10	11	91.6	0	0
Neuritis	5	25	3	25	0	0
Diarrheal Disease	1	5	2	16.6	0	0
Peripheral Vascular Disease	11	55	5	41.6	2	6
Urinary Casts (Granular)	7 (incomplete)		9	75	0	0
Urinary R B C's	6 (incomplete)		7	58.3	0	0
Duration of Nephropathic Syndrome	4.4 yrs. (1 to 15)		5 yrs. (1.5 to 22)		0	0
Emotional Disturbances						
Grade 0 to 2 plus	11	55	5	41.6	26	79
Grade 3 to 4 plus	9	45	7	58.4	7	21
Autopsies			5			
Typical KSW Lesions			4	80		
Chronic Glomerulonephritis			1	20		

*Rounded to the nearest integral per cent.

tion of diabetes and practically no evidence of vascular degenerative processes, almost exactly half the cases were definitely deemed to be under poor control as indicated by extremely erratic carbohydrate balances and/or one or more acidotic incidents. Almost all of these control cases were under very close constant personal observation, if not supervision, because of their problems of control or incidental infections, pregnancies, gastric hemorrhage, and so forth. It it difficult to understand why they stayed free of vascular complications if sugar free specimens are prerequisites for freedom from these complications.

The one striking feature of our study was prompted by a curiosity about the emotional make-up of the patients. It seemed to one of us on seeing the first few cases of nephropathies "go down hill," that there was a failure of the natural instinct of self preservation about the patients' attitude toward their diabetes. These first cases were in comparatively young females with deep rooted emotional problems. All these patients died. A rough estimate of the emotional background and stresses was made in our cases, grading them from 0 to 4 plus emotional stresses. It will be seen that exactly half the diabetic nephropathies were graded as "three to four plus" emotional stresses; but that only 20 per cent of the control cases were in that category. Hinkle and Wolf [34] in their paper emphasize chiefly the effect of emotional stresses on the carbohydrate balance and blood sugar fluctuations. But is it not conceivable, especially in the light of some of Selye's work, that the

emotional factor may be a major one in the promotion of vascular degenerative processes, among which are the glomerular lesions?

SUMMARY AND CONCLUSIONS

AN OUTLINE of some of the features of diabetic nephropathies has been presented and an analysis made of 32 cases of diabetic nephropathies compared to a control series of thirty-three cases of diabetes of an average duration of 23 years without evidence of nephropathy.

Sixteen of the 33 control cases were deemed "under poor control" as judged by erratic carbohydrate balance and/or one or more acidosis incidents. It was, therefore, difficult to understand why they remained free of nephropathy and practically free of vascular degenerative processes.

It is suggested that the emotional background of the patient may play a larger part in the development of vascular and glomerular complications than previously suspected. This subject calls for further consideration.

A bibliography of 35 citations appears in the authors' reprints.

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Some Patients Don't Want to be Reassured

Sometimes the worst thing a doctor can do is to tell a patient he's perfectly well. That's what Dr. Andrew D. Hart said in the November 20 (1954) J.A.M.A.

Some patients don't really want to be reassured. These are the patients with "cardiac neurosis," which may only be a substitute for greater problems—such as tension or fear of mental illness.

This patient visits the doctor with complaints of heart symptoms, and is told firmly and reassuringly that he has no heart defect. The patient may then go to another—or more than one—doctor seeking another diagnosis. He may quote the first doctor as having said such things as "You have six months to live" or "I've never seen a worse heart than yours." The patient actually may believe this was what the doctor said—since even normal memory is far from accurate, and nothing is so helpful as recollections to people who "dearly" need to believe something.

Further reassurance does not help. The patient appears to be pleased with good news, but gives himself away with such statements as "It's just got to be physical or it must be mental." He might admit he would be "greatly relieved" if anything tangible could be found.

The behavior of such patients suggests that the anxiety about their hearts is necessary to them. A tangible organic defect serves as a "lesser-evil" defense against greater, undisclosed fears.

"Most of these persons have been inwardly tense and high strung as far back as they can remember," he said. "Nearly all admit to excessive worry. Sometimes an insidious emotional depression has led to a stifling, 'heavy heart' sensation that is none the less real because it is impossible to describe."

Unrest, undermining of self-confidence, feelings of unreality, and dread of mental disease often result in a person's conviction that he has heart disease. He becomes preoccupied with this. A firm statement that there is no heart disease only makes the patient discontented. He doesn't know how to explain his feelings in the face of an excellent physical report.

Rather than an outright statement of good condition in such cases, Dr. Hart suggested that physicians should avoid a firm diagnosis and work for a closer relationship with the patient to find out what his deeper problem is. Some patients then will respond to treatment aimed at turning their energy and talents away from their concern about disease and toward outside interests and activities.

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Association of Pregnancy With Cancers of the Breast and Cervix

Once thought to be a rarity, cancer of the breast or uterus during pregnancy is now known to be worthy of serious attention. Dr. Finn does not believe that pregnancy should be interrupted for cancer of the breast, recommending radical mastectomy and extra-abdominal irradiation during pregnancy. If a cancer of the cervix is detected early in pregnancy, a spontaneous abortion by x-ray irradiation is recommended, to be followed by radium.

The coexistence of pregnancy and cancer was once almost unheard of. Now it is becoming increasingly important. This is reflected in the changing causes of maternal mortality during the last decade at the New York Hospital, as seen in Table 1. Hemorrhage, toxemia and infection have yielded to cancer and heart disease. Now the two leading causes of maternal death are the same as for nonpregnant American women between the ages of 20 and 45, as determined by the Metropolitan Life Insurance Co.[1]

TABLE 1. CAUSES OF MATERNAL MORTALITY NEW YORK HOSPITAL 1945 TO 1952

Cause	Number	Per Cent
Cancer	7	29.3
Cardiac Disease	7	29.3
Infection	3	12.6
Cerebral Hemorrhage	2	8.3
Hemorrhage	1	4.1
Toxemia	1	4.1
Embolism	1	4.1
Cortical Necrosis Kidney	1	4.1
Tranfusion Reaction	1	4.1

The formerly rare association of pregnancy and cancer resulted in many divergent plans of treatment. These variances of opinion, based as they were on limited experiences, prompted me to review the literature as well as the experience of the New York Hospital during the past twenty years. Treatment has been based on one principle: namely, treat the cancer primarily. The pregnancy is interrupted only incidental to treatment of the cancer. The incidence of pregnancy complicated by cancer is shown in Table 2. The breakdown by organ

TABLE 2. PREGNANCY AND CANCER INCIDENCE

	Number	Incidence
Pregnancies	71,827	
Pregnancy and Cancer	82	1:900
Pregnancy Simultaneous with Cancer	50	1:1450
Pregnancy after Cancer	32	1:2250

*Dr. Finn is Assistant Professor of Obstetrics and Gynecology at Cornell University Medical College. This paper was read, by invitation, at the Annual Meeting of The Medical Society of New Jersey, May 19, 1954.

system is outlined in Table 3. My discussion in this paper is limited to the two most common cancers of the female: breast and cervix.

TABLE 3. TYPE OF CANCER ASSOCIATED WITH PREGNANCY

Organ	Pregnancy After	Pregnancy Simultaneous	Total
Breast	10	12	22
Lymphomas	4	16	20
Gastrointestinal	5	5	10
Genital	0	8	8
Sarcoma	3	2	5
Thyroid	2	2	4
Brain	2	2	4
Melanoma	1	2	3
Parotid	2	0	2
Larynx	2	0	2
Palate	0	1	1
Skin	1	0	1

BREAST CANCER

TWENTY-TWO women with carcinoma of the breast were observed during pregnancy. Twelve were pregnant and had a simultaneous cancer of the breast; ten became pregnant after treatment of breast cancer. The clinical data of these patients are condensed in Tables 4 to 10.

TABLE 4. BREAST CANCER AND PREGNANCY BY AGE

Age	Number
25-30	1
31-35	9
36-40	0
40-45	2

TABLE 5. BREAST CANCER AND PREGNANCY BY PARITY

Parity	Number
0	1
1	4
2	3
3	3
4	0
5	1

TABLE 6. BREAST CANCER AND PREGNANCY DURATION OF SYMPTOMS

	Time	Cases	Total
Before	2 yrs.	1	5
	1 yr.	2	
	6 mos.	1	
	1 mo.	1	
During	20 wks.	3	6
	32 wks.	3	
After	4 mos.	1	1

TABLE 7. BREAST CANCER AND PREGNANCY: MASTECTOMY

Mastectomy During Pregnancy:	7
12 wks.	2
20-24 wks.	2
30-32 wks.	2
40 wks.	1
Mastectomy After Delivery:	4
1 wk.	1
1-3 wks.	1
2-8 wks.	1

TABLE 8. TREATMENT OF BREAST CANCER DURING PREGNANCY

Surgery	
Radical mastectomy	10
Simple mastectomy	1
Irradiation	
Pelvic Irradiation after delivery	1
Extra-pelvic irradiation during pregnancy	10

TABLE 9. AXILLARY METASTASES AND OUTCOME OF PREGNANCY

Axillary Metastases:	
Present	9
Absent	1
Outcome of Pregnancy:	
Premature Delivery	2
Term Delivery	10

TABLE 10. BREAST CANCER AND PREGNANCY: SURVIVAL RATE

Alive 7		Dead 5	
9 months	1	1 week	1
1 year	1	6 months	2
4 years	1	1 year	1
5 years	2	1-2 years	1
7 years	1		
11 years	1		

Symptoms antedated pregnancy in 5 patients. These patients however, did not consult a doctor until pregnancy occurred. Thus, pregnancy led to the recognition of cancers which would otherwise have been detected only in a much later stage. Seven women first noted symptoms during pregnancy: 3 at 20 weeks and 4 at 32 weeks.

Since our treatment philosophy is a primary attack on the cancer, radical mastectomy was performed regardless of the duration of the pregnancy. Apart from the increased vascularity and the need for meticulous hemostasis, the operation can be performed as readily as on the nonpregnant breast. At present the only exception to a radical mastectomy during pregnancy would occur if a breast cancer were discovered in the last weeks of pregnancy. Under these circumstances the mastectomy would be deferred until after delivery. Axillary metastases were present in 9 of the 10 women who underwent radical mastectomy.

X-ray irradiation was given through thoracic, axillary and superclavicular ports to 10 patients regardless of the duration of pregnancy. The abdomen was shielded during these treatments. Abdominal x-ray for castration was withheld until after delivery. Extra pelvic irradiation administered in this manner produced no ill effects on either the baby or on the duration of pregnancy. Ten deliveries occurred spontaneously at term. One premature spontaneous delivery occurred at 29 weeks in a patient with cachexia and multiple skin and pulmonary metastases. This association of premature delivery with the cachexia of far advanced cancer has been common in our experience with cancers of all types. All the babies were normal. No placental metastases were found.

Four of our patients (33 per cent) are alive and well more than 5 years after treatment. Three are alive for lesser periods. Five (42 per cent) have died.

Several delays in diagnosis occurred. The increased growth of the breast during pregnancy may make the detection of a mass difficult. One patient with a diffuse scirrhous cancer was observed throughout the entire course of pregnancy. A mass felt in the breast of a patient who was 32 weeks pregnant was misinterpreted as fibrocystic disease; hence operation was deferred until after delivery. A third patient was told that a mass felt during the fourth month post partum was a milk cyst. This delayed mastectomy for three more months. No confusion occurred in this series between breast abscess and inflammatory carcinoma. These errors stress the need for more attention to palpation and interpretation of breast masses during pregnancy. Biopsy, either by aspiration or excision, can be performed without injury to the pregnancy. It is well to biopsy the wall of any abscess which has been present for more than a few days.

SIMULTANEOUS PREGNANCY AND CANCER

THERE are 3 controversal points in the foregoing presentation: (1) The therapeutic program; (2) The survival rate and (3) Whether breast cancer grows more rapidly in the presence of pregnancy.

Our plan of treatment may be best summarized thus:

1. Radical mastectomy
2. Extra pelvic x-ray irradiation
3. Forbidding of breast feeding
4. Castration, if indicated, is done after delivery

It is not necessary to interrupt the pregnancy to perform any of these. Hence our treatment has been as in any other complication of pregnancy, to treat the complication.

(1) The plan of treatment proposed is aimed directly at the cancer. The pregnancy is not interrupted. Radical mastectomy is performed regardless of the duration of pregnancy. Thoracic, superclavicular and axillary x-ray irradiation is given during pregnancy. Abdominal x-ray for purposes of castration is reserved until after delivery.

Many surgeons do not approve of this. Instead they recommend immediate termination of pregnancy when breast cancer is discovered. Geschickter[2] writes that mammary cancer already present or arising in preg-

nancy is unfavorably influenced because of the early age of the patient, the vascularity of the breast and the intensity of endocrine influences. He further concludes that since breast cancer following spontaneous abortion has a better prognosis, that therapeutic abortion should be done in the first six months of pregnancy prior to treatment of the breast cancer. This conclusion regarding the benefit of spontaneous abortion is based on the observation of four patients, two of whom survived. This is hardly the evidence on which to base such an important decision. Chase [3] advises immediate interruption of the pregnancy, large doses of testosterone and radical mastectomy with adequate transfusions. Cole and Rossiter [4] state that "Pregnant patients should have termination of pregnancy, ovariectomy and radical mastectomy." Cheek [5] sent a questionnaire to 47 distinguished surgeons regarding the necessity for termination of pregnancy. Nineteen of the 35 who replied favored immediate interruption of the pregnancy. Lee [6] favors immediate therapeutic abortion. Adair [7] believes that pregnant patients with breast cancer and axillary metastases have a 2½ times better chance for survival when therapeutic abortion is done.

There is, however, substantial evidence that termination of pregnancy does not improve the prognosis of breast cancer. Westberg [8] who studied 4,747 patients with breast cancer in Sweden observed 224 pregnant or lactating women. He states "Nothing has been found to bear out the opinion that induced abortion should improve the prognosis." Smith [9] after reviewing 22 pregnant patients with breast cancer at the Memorial Hospital advised against interruption. Remold [10] advocates immediate treatment of the breast cancer and advises specifically against termination of pregnancy. Parker and Alredge [11] write: "It seems, however, desirable to attack the lesion directly as soon as suspicion has been cast. Women suspected of having carcinoma of the breast during pregnancy or lactation should, in the absence of demonstrable distant metastases have biopsy and radical operation at the earliest moment. Delay for interruption of pregnancy or waiting for a term delivery is ill advised. Complete radical removal of the neoplasm need not interfere with the subsequent course of pregnancy. Naturally, if the neoplasm is completely removed, the stimulating effect of pregnancy or lactation is eliminated."

White [12] states "The statements of Adair in regard to the favorable effect of abortion on the course of carcinoma of the breast treated prior to pregnancy or discovered during pregnancy could not be confirmed in this analysis." Reinhoff [13] draws a similar conclusion. Weinstein and Roberts [14] and Aaron, Beilly and Mitchell [15] have recently made single case reports in which radical mastectomy was done during pregnancy. Thus, there is no unanimity of opinion; but the trend is away from termination of the pregnancy and toward radical mastectomy and extrapelvic x-ray irradiation during pregnancy.

(2) A similar variance of opinion exists regarding the 5 year survival rate of pregnant patients with breast cancer. It has been categorically stated that no pregnant patient with breast cancer has survived for more than 5 years. This, however, has now been retracted in view of the increasing number of survivors who have been reported. Our survival rate was 33 per cent which approximates that of non-pregnant women.

Haagensen and Stout [16] recorded 20 patients with radical mastectomy done during pregnancy. There were no permanent cures. Nineteen had axillary metastases. The one patient who survived the fifth year had a recurrence in the sixth year. This influenced Haagensen [16] to such an extent that he included pregnant patients with breast cancer in the categorically inoperable cases. Five years later Haagensen [17] writes "His experience may have been a particularly unfortunate one." Cheek's [5] questionnaire to 47 doctors elicited reports of 151 cases with 8 five year cures (5 per cent). Geschichter [2] observed no survivors in 15 patients who were pregnant simultaneously, but a 23 per cent survival rate in 39 patients during or immediately after lactation. Brooks and

Proffett [18] noted one 15½ year survival of a group of 6 women with simultaneous pregnancy and cancer. Harrington [19] observed a mere 9 per cent survival rate when axillary metastases were present in breast cancer complicating pregnancy, but this increased to 64 per cent when there were no axillary metastases. The overall survival in this series was 33 per cent. Two of the 4 five year survivors had had axillary metastases at the time of the original surgery.

(3) Does cancer grow more rapidly during pregnancy? Geschichter [2] states that breast cancer involves the skin and metastasizes earlier in the presence of pregnancy. He believes that an acute, fulminating cancer may accompany lactation. He feels that the rate of growth is accelerated by the increased estrogen output during pregnancy. The relative youth of the patient and the increased blood supply of the breast may also lead to more rapid growth. Another reason for the *apparent* rapidity of growth during pregnancy is that many of the cancers antedate the pregnancy and are already in an advanced stage at the onset of pregnancy. This had been pointed out by Geschichter.[2] The changes in the size and consistency of the breast also interfere with palpation of masses, hence result in delayed detection.

The pregnant woman is more likely to have an infiltrating type of cancer as mentioned by Geschichter [2] or a solid type of cancer as described by Westburg.[8] Both of these are more malignant histologically and metastasize more rapidly. Westburg's quotation may aptly summarize the question. "It has been stated that cancer grows more rapidly and metastasizes earlier during pregnancy. This, however, seems to be influenced more by the anatomic extent and the histologic type of the cancer than by the presence of pregnancy."

We have forbidden nursing to allow the breast to return to normal as rapidly as possible and also because of the possibility of transmission of a breast cancer factor through the milk.

Castration seems to be of value in the treatment of breast cancer. Some favor oophorectomy, but most authorities prefer x-ray irradiation. Harrington [20] administers this to all patients with axillary metastases. Adair [7] and others advocate castration in the presence of axillary metastases or more advanced disease. Universal castration would eliminate our next group of patients.

PREGNANCY AFTER CANCER

TEN patients were observed who became pregnant after the treatment of breast cancer. Their clinical data are summarized in tables 11 to 15. Their average age was 29; their average parity was one. Radical mastectomy had been done on eight women; simple mastectomy on two. Eight cancers were confined to the breast; only 2 had axillary metastases. Four had received axillary, superclavicular and thoracic irradiation. None of these patients had been given abdominal irradiation. Pregnancy occurred within a year of treatment in 5 patients and over a year after treatment in the other 5 patients. Therapeutic abortion was performed in 3 patients because of the proximity to the mastectomy or the presence of metastases. One premature spontaneous delivery occurred at 30 weeks and 6 full term spontaneous deliveries resulted. All the babies and placentas were normal. Four of these patients (40 per cent) are alive for more than 5 years, while 3 (30 per cent) have died.

TABLE 11. PREGNANCY AFTER BREAST CANCER: AGE AND PARITY

Age	Number
25-30	4
31-35	2
36-40	2
41-45	2
Parity	**Number**
0	4
1	2
2	4

TABLE 12. PREGNANCY AFTER BREAST CANCER: TREATMENT

Surgical (10)	
Radical Mastectomy	8
Simple Mastectomy	2
Extra-pelvic Irradiation (4)	
Yes	4
No	6

TABLE 13. TIME ELAPSED AND AXILLARY METASTASES

Time Elapsed	
Under 6 months	3
6 months to 1 year	2
1 to 2 years	5
Axillary Metastases	
Present	2
Absent	6

TABLE 14. OUTCOME OF PREGNANCY AFTER BREAST CANCER

Therapeutic Abortion	1
Miniature Cesarean Section	2
Premature Delivery	1
Term Delivery	6

TABLE 15. PREGNANCY AFTER BREAST CANCER: SURVIVAL

Alive: 7		Dead: 3	
1 year	1	2 months	1
2 years	1	1 year	1
3 years	1	2 years	1
7½ years	1		
11 years	1		
13 years	1		
15 years	1		

This group consisted of young women in their twenties who were treated by radical mastectomy. Castration was not performed because of the limited extent of the cancer. Hence, pregnancy which in the opinion of many, should have been interdicted, occurred. Two pregnancies were interrupted because of metastases. A third pregnancy was interrupted because only 3 months had elapsed since the mastectomy. The remaining pregnancies proceeded without apparent harm to the patient.

Some question the advisability of pregnancy following breast cancer. Chase [3] wrote "Surely no woman who had a radical operation or other treatment for breast cancer should be allowed to become pregnant." This is a select group of preferred risks who have not been castrated because the cancer has been confined to the breast without axillary metastases. It is usually preferable to allow 2 or 3 years to elapse after mastectomy. Then if metastases have not appeared, the cancer has probably been completely extirpated. Thus the possibility of recurrence and simultaneous pregnancy is reduced. Trout [21] and other older writers observed development of breast cancer in the opposite breast of 13 women during a subsequent pregnancy. Most observers fail to confirm this. Haagensen [17] writes "If pregnancy follows successful removal of cancer of the breast, it has no special unfavorable prognostic significance." White [12] observes, "It is probable that pregnancy is not contradicted in patients with treated carcinoma of the breast without noticeable metastases" and further "The gross survival rate among patients in whom pregnancy followed treatment of a breast carcinoma is comparable to that in patients who did not become pregnant."

Cheek's questionnaire [5] showed that 22 surgeons thought that a subsequent pregnancy played no role in the development of carcinoma in the remaining breast, while 6 thought that it did. Our experience is in accord with the majority opinion here.

PREGNANCY AND CANCER OF CERVIX

THE coexistence of cancer of the cervix and pregnancy has been rare at New York Hospital. Only 6 patients have been observed with simultaneous invasive cancer of the cervix and pregnancy among the 71,827 patients of the last 20 years. This experience is succinctly expressed in Table 16. No *in situ* cancers have been included in this report. Certain facts stand out. Bleeding had been present for 4 and 6 months respectively in two patients before onset of pregnancy. Since these

TABLE 16. CANCER OF THE CERVIX AND SIMULTANEOUS PREGNANCY

Symptoms Months	Biopsy Months	Treatment	Delivery	Survival Years
2	2	X-ray P.P. Hyster.	Spont. Ab.	3
6	6	X-ray A.P.	Prem. Del.	8
-4	5	X-ray A.P. Radium P.P.	Spont. Ab.	8
2	1PP	X-ray P.P. Radium P.P.	F.T.S.	7
3	1/3PP	X-ray P.P. Radium P.P.	F.T.S.	1
-6	1	Hyster.	Oper. Ab.	½

patients had not considered the symptoms sufficient to consult a doctor, the pregnancy was beneficial in that it led to examination and detection of the cancer. Biopsy was done in these patients and in other pregnant patients without initiating abortion or producing excessive bleeding. The average parity was 2. The time of detection of the cervical cancer is outlined in Table 17.

TABLE 17. TIME OF DETECTION OF CERVICAL CANCER DURING PREGNANCY

Abortion	2
Course of Pregnancy	2
Postpartum	2
Total	6

Two were treated during pregnancy. Two were treated after abortion. The remaining two were treated after term delivery. The survival rate was 50 per cent. Five of the cancers were squamous and 1 was adenocarcinoma.

A seventh patient (not included in this series) entered the hospital 4 months after a premature delivery elsewhere. A stage 2 squamous cancer of the cervix was treated by abdominal and vaginal irradiation. Radical hysterectomy done 6 weeks afterward showed positive obturator nodes.

TREATMENT FOR CERVICAL CANCER

If the pregnancy is viable, treatment consists of cesarean section and subsequent irradiation. If the cancer is detected before the fetus is viable, the treatment is a 3-stage one: (1) x-ray irradiation; (2) spontaneous abortion; and (3) radium. See Table 18. This plan presupposes detection during pregnancy. The cancer may be discovered as a by-product of curettage and/or cervical biopsy at the time of spontaneous abortion. There seems to be a relatively high rate of abortion associated with cervical carcinoma. The carcinomatous tissue has been occasionally removed by the curette, but more frequently has been detected by cervical biopsies at the time of curettage. I have recently been taking biopsies of the cervix in two areas: 6 o'clock and 12 o'clock. I do this at the time of all completions in an effort to determine the histologic appearance of the cervix and the incidence of unsuspected cancer.

The cervix should be inspected at the initial antepartum visit. Bleeding during early pregnancy warrants reinspection. It may show threatening abortion, or an erosion, or no lesion; or it may show a lesion which deserves biopsy. Vaginal smears or direct cervical contact smears can be performed without harming a pregnancy. Smears may be informative,

TABLE 18. TREATMENT OF CERVICAL CANCER DURING PREGNANCY

1. Previable Pregnancy

   X-ray irradiation
   Spontaneous Abortion
   Radium

2. Viable Pregnancy

   Cesarean Section
   X-ray and Radium irradiation

but the *definite* knowledge obtained by biopsy is preferable. Biopsy may be obtained by a biopsy punch, but even a coning biopsy has been done without causing abortion or uncontrollable bleeding. Lack of inspection and biopsy in two patients who bled in early pregnancy and intermittently throughout pregnancy led to failure of detection of cancer until after delivery. These two patients delivered spontaneously through the carcinomatous cervix without affecting the cancer. This, however, is not recommended.

Controversies about treatment include:

(1) Irradiation vs surgery
(2) Therapeutic abortion
(3) The practically insoluble problem of the cervical cancer first detected in the sixth or seventh month of pregnancy.

My preference has always been for an irradiation approach for cancer of the cervix regardless of pregnancy. In recent years, patients with stage 1 and stage 2 cancer of the cervix have been treated by abdominal and vaginal irradiation followed by radical hysterectomy and pelvic lymph node dissection. This surgical approach has been on an experimental basis and does not alter my thesis that radiotherapy is the basis of treatment. Our treatment as in cancer of the breast is directed primarily against the cancer. Abortion or premature delivery of a macerated infant is permitted as an inevitable result of treatment. Therapeutic abortion or hysterectomy is not done. Cesarean section is performed in the last 6 weeks of pregnancy to protect the infant from the effects of irradiation. X-ray is then initiated during the second week after delivery.

The most difficult situation arises in six to eight month pregnancies if delay of treatment for a few weeks or a few months will result in a baby closer to maturity. These problems can be decided only on an individual basis. I am skeptical enough about the natural course of development of any cancer to question whether a delay of a short period would inevitably affect the ultimate outcome; but I would not withhold treatment from any patient who desired it, regardless of the effect on the fetus.

The question of regression of cervical cancer after the cessation of pregnancy is unanswered. My philosophy is this. Invasive cancer does *not* regress. I treat invasive cancer of the cervix as soon as it is discovered. It is disputed whether non-invasive cancer of the cervix may regress after the end of pregnancy. Epperson,[22] and Nesbitt and Hellman[23] assert that it may. Regression has also been reported by Brown,[24] Hirst,[25] Johnson[26] and Novak.[27] Murphy and Hebuet[28] deny that such regression occurs. Greene[29] has observed persistence of *in situ* changes in 12 of 14 pregnant patients.

No regression has been observed in the current material. Some changes may occur in the pregnant cervix which may mimic *in situ* cancer, but no possible confusion can exist with invasive cancer. Pathologic criteria to distinguish invasive cancer from non-invasive cancer exist. To disregard them is folly and will lead to delays in diagnosis as in the cases enumerated by Schiefstein.[30] No harm, however, can come from observing a doubtful case of *in situ* cancer during pregnancy. Smear and biopsy may be done repeatedly throughout pregnancy in such cases.

The subject of cervical cancer and pregnancy is so vast that no attempt has been made to report the entire writing on this subject. Only representative authors have been reviewed and discussion will center on three points:

(1) Incidence
(2) Treatment
(3) Five year survival.

The relative incidence of the complication is shown in Table 19.

Treatment may consist of irradiation or surgery or of combinations thereof. Most authors prefer x-ray irradiation during the

TABLE 19. INVASIVE CERVICAL CANCER COMPLICATING PREGNANCY

Author	No. Preg.	No. Ca.	Incidence
Maino (32)	8506	26	1:300
Brown (24)	9056	19	1:500
Thornton (34)	8450	5	1:1700
Johnson (26)	29,394	12	1:2400
Ward (35)	36,274	10	1:3600

early months followed by radium insertion after expulsion of the fetus. Heyman[33] and Kottmeier[31] have had large experience with this procedure. They permit spontaneous abortion in preference to hysterotomy or hysterectomy. When x-ray irradiation or radium must be applied, most authors perfer cesarean section to remove the child from the influence of the ionizing radiation. Some will use x-ray irradiation and even radium in the presence of a viable child. Atwell[37] recommends version to remove the child from the influence of the radium. The high incidence of microcephalic idiocy shown by Goldstein and Murphy[38] and Jones and Neill[39] resulting from irradiation during pregnancy suggests the advisability of removal of a viable child from the harmful effects of irradiation. Irradiation should be used only when the child is previable; otherwise it should be delayed until after delivery.

A primary surgical approach has never been popular in this country although several European authors have used it with good results.

Combinations of irradiation and surgery include x-ray irradiation followed by radical hysterectomy. Ward[35] recommends supracervical hysterectomy prior to therapy since in his series the five year survival of stump cancers has been 43 per cent as contrasted with 28 per cent.

There is a difference of opinion about allowing spontaneous abortion after x-ray therapy. Most permit it. Johnson and Weinfurtner,[26] however, write emphatically: "No patient should be allowed to deliver vaginally because of the dangers of hemorrhage, infection and dissemination of malignancy." While no one would wish a term baby to deliver through a carcinomatous cervix, there is no proof that a spontaneous abortion has hurt any patient with cancer of the cervix.

Survival rates have not been influenced by the presence of pregnancy as shown in Table 20. All agree, however, that cancer of the cervix detected in the puerperal period has a poor prognosis. Thus Kottmeier[13] noted a 5 year survival rate in 62 patients of 23 per cent, half of that observed when cancer was detected during pregnancy. This merely accentuates the fact that cancer detection has been delayed.

TABLE 20. FIVE YEAR SURVIVAL OF PREGNANT PATIENT WITH CERVIX CANCER

Author		No.	Per Cent Survival
Sadugor (33)	N.Y.	124	27
Maino (32)	Minn.	20	30
Johnson & Weinfurter (26)	Ky.	12	50
Kottmeier (31)	Sweden	38	57

SUMMARY

EXPERIENCE during the past twenty years at the New York Lying-In Hospital with pregnant patients with cancers of the breast and cervix has led to the following conclusions:

Primary treatment should be directed to the cancer. The pregnancy need not be interrupted except as an inevitable accompaniment of treatment. Patients with breast cancer have successfully undergone radical mastectomy and extra-abdominal irradiation. The only difference between the treatment of the pregnant and nonpregnant women with breast cancer has been the deferment of abdominal x-ray for the purpose of castration until after delivery has occurred.

Patients with cancer of the cervix have been treated by abdominal irradiation in the early months of pregnancy. After spontaneous abortion has occurred, radium treatment was begun. Patients in the later months of pregnancy have been delivered by cesarean section following which abdominal irradiation and radium therapy have been administered.

The primary aim of treatment has always been to treat the cancer. The pregnancy is interrupted only incidental to treatment of the cancer.

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A bibliography of 39 citations appears in the author's reprints.

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Camden

Evaluation of Resistance to the Psychosomatic Approach*

Many illnesses have large emotional components. Patients are often reluctant to accept this. Doctors sometimes take the easy way and blame the symptoms on a little anemia, a touch of arthritis, or a focal infection. An honest facing of the psychic component in the somatic complaint is a necessary preliminary to the relief of the symptoms. In this paper, Dr. Mahoney makes a common-sense approach to this every-day problem.

Why is a patient so reluctant to accept a "psychosomatic" explanation? Before discussing that, let us first agree on our terms: resistance, psychoneurosis, behavior.

Resistance is the reluctance (mainly unaware) of the patient to relinquish accustomed patterns of thinking, feeling or acting, however neurotic, in favor of new and untried modes of behavior.

Psychoneuroses constitute a group of behavior disorders representing inefficient adaptation to the stress and conflict of life.

Behavior is the integration and coordination of the internal (physiologic) and external social actions of the human organism.

With these concepts clarified, our problem may be stated in simpler terms. Why is the patient so reluctant to accept the explanation that his disturbed social actions result in disordered physiology felt by him as headache, stomach pain, or by such complaints as: "my stomach hurts;" "my colitis is bad;" or, "my skin is terrible;" and that in order for him to improve, some change in his (social action) thinking, feeling or acting is necessary.

The resistance to accept the explanation is based upon what must follow if it is accepted; namely, that the individual is not functioning as efficiently as he thought he was. The mere acceptance verbally by the patient that his illness is "due to nerves" is not an indication that any resistance has been overcome. He may have just filed it in his memory to be recalled on stimulation by questioning with little meaning attached. Before one can state that the patient's resistance has been overcome, two observations must be made. One, the thinking, feeling and acting of the patient has become more efficient; and, two, the clinical picture must be improved.

The source of the universal resistance towards the acceptance of illness due to mental disturbance is threefold: *First*, is society's attitude, the patient's fear of being branded as "neurotic." *Second*, both the aware and unaware attitudes the patient has concerning mental illness. *Third*, the attitude the physician has towards his own and other people's

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mental problems. The phrase "mental disturbance" is used deliberately here. Too much time has been spent trying to find a nice name for mental illness. This indicates only our own resistance. A mental disturbance may, of course, vary from something minor like a mild loss of appetite over an examination, to a major psychosis.

One of the phenomena of group psychology, is that the individual finds permission in the group to vent his anger, to show his superiority, and to depreciate what he fears. Society has all these reactions to mental illness. The patient realizes society's attitude towards mental illness and fears any connection with it. Rather than an attempt to reassure the patients that "it's accepted nowadays," or brush off his objections as not important, calm recognition of the patient's fear is much better. The attitude should be, "I can't attempt to explain society's ills, but I can help you."

THE second source of the resistance lies in the patient himself. Patients who are confronted with the idea that their mental processes are disturbed, become frightened and angry. They are frightened because one is touching the very core of the individual. It is best expressed in the Cartesian phrase, "I think therefore I am." They are angry because a blow has been struck at their pride, the ideal they had of themselves as more capable and efficient is threatened. They may react to their fright by being critical of the doctor or the profession. Since the doctor has implied that something is disturbed in their thinking, the patient may reverse the idea and suggest to the doctor that perhaps there is something wrong in *his* thinking. A frightened person soon becomes angry. Anger may not show in the office, but may be revealed as a complete refusal to accept any psychosomatic explanation. It may also show up as a polite "acceptance" of the explanation, but a complete lack of cooperation.

What the patients are unaware of, is that they expect their doctor to relieve them by magic, just as during infancy, quick comfort was found in parents' arms. Many adult patients expect the same understanding and attitude, the same omniscience, they believed their mothers possessed. But instead of being helped like a hurt child, the patient finds that he is expected to give, to change. Many times the physician is thus in the role of a scolding parent; the patient is the "defiant" child refusing to accept the information.

The third source of the resistance lies in the physician himself and his attitude towards mental illness. All of us have a healthy respect for major mental illness. Those of us suffering from symptoms caused by mental disturbance, have wished that we had something we could take an antibiotic for, and be cured.

We must ask ourselves honestly do we patronize or feel superior to that group of patients whose complaints are caused by mental disturbance? This is a perfectly natural reaction. It is only by conscious discipline that the reverse (our looking upon this group of people as subject to illness) could be true. By patronizing our patients, we become the patron, the superior one. A schizophrenic patient, on being presented at staff as an example of a marked improvement, later said to his doctor: "You just wanted to show off, didn't you? You wanted to impress them how good you were." The doctor was aghast, but admitted the truth and therapy progressed.

ONE too-prevalent assumption is that people with psychosomatic symptoms are immature and inadequate. This is often entirely erroneous. Certainly a glance at those around us with psychosomatic symptoms will demonstrate ably that many of them lead lives of productivity. The answer is that they have a problem in only part of their personality and that a great deal of the personality functions well. The psychosomatic symptom does not necessarily signify an immature personality. It may, indeed, signify the opposite. Thus one man may become angry, keep his temper under check and have a headache, while another may burst into violent rage. Certainly the latter behavior is more infantile.

If the physician's own mental disturbances

can be viewed as a powerful force, difficult to handle, then he need not look with disdain upon the patient and tell him it's "just his nerves." However, if his own problems require rigid control and denial, to be handled successfully, then he may need to depreciate the significance of mental illness.

In discussing mental disturbances with patients, the physician immediately runs into a problem of his own. Heretofore he had anatomic terms, x-ray reports, and laboratory data to support him. Now he faces the patient with only his own ideas. Not relishing this position, he will say a few words like, "There is nothing wrong." Or, "It's functional," and retreat to safer grounds. The patient's resistance promptly increases. He senses the physician's insecurity.

The physician, like the patient, has an ideal picture of himself. If the patient refuses to accept his diagnosis, or if accepting it begins to make demands upon him that he cannot cope with, his pride suffers some as well. The physician must expect when he enters this area not prompt acceptance, but reluctance, for he is asking the patient to give up accustomed patterns of behavior developed over a long period.

It would be helpful if the physician approached every mental problem with this thought: "no matter how illogical the behavior of the patient seems to be, in his own mind it is justifiable and answers a purpose." This does not mean that the physician concurs with the patient's reasoning, but that he tries to understand why he thinks, feels or acts as he does.

If the physician, when entering this area, is confident and sure of himself, the patient will feel it and there will be less resistance. The following approach is to be used in conjunction with, not separate from, the usual approach to the patient. It begins with our initial contact with the patient. The problem of "nerves," emotions or mental disturbance should not be brought up as an after-thought.

The first step in handling the resistance of the patient is to do what is necessary to make a positive diagnosis. The physician must feel confident of his diagnosis before proceeding further. Along with any necessary somatic diagnostic methods, the following information is elicited:

(1) Family History
   a. Mental instability in either parent
   b. Separation of parents
   c. Psychosomatic reactions in either parent

(2) Childhood History
   a. Nightmares
   b. Physical illness
   c. Enuresis

(3) Chronological correlation between emotional problems and the onset of symptoms

(4) History of other symptoms indicative of mental disturbance

(5) Reproduction of the symptoms during the examination

The diagnostic formulation is not in terms of the dichotomy: functional or organic. It is in terms of how large is the emotional component, how large is the structural component, how does each influence the other.

The second step is achieving rapport with the patient. If the physician views a "nervous reaction" with just as much concern and interest as collagen disease or suspected neoplasm, the patient will relate much better. Many physicians are unaware of the tremendous importance patients put on every word they say. This includes tone of voice and mannerisms.

The third step is elicitation of the patient's emotional problems. Generally speaking, any question requiring a "yes" or "no" answer is a poor one. Inquiries such as: "Are you worried about anything?" are likely to be nonproductive. Far better is: "Just what does your routine day entail"? Or, "What do you actually do on your job?" "Under whom do you work?" Or, "Do you and your wife entertain much?" "What kind of a job would you like to have?"

The fourth step is to correlate the problem with the symptoms. All patients have problems. It must be determined if the problem is severe enough to cause trouble. It helps to find out if the problem is chronologically related to the symptom. Does it cause a loss of appetite,

sleep, or efficiency at work? Does the problem cause depression or unhappiness?

After a diagnostic study and establishment of a good relationship with the patient, the physician may feel sure that there is a psychosomatic problem. However, the patient may repeatedly assert, "I understand what you are trying to get at, but nothing is bothering me except the symptoms." There is certainly nothing wrong with treating this patient symptomatically with analgesics, antispasmodics or sedatives. It may take the patient 6 months to a year to accept the idea. Perhaps some acute stress in his environment will convince him. There is no objection † to giving medications while working on the patient's emotional problem, if the patient understands that his basic problem is a mental one.

Two types of problems of patients should be discussed. One patient is repeatedly difficult and disagreeable, regardless of kindness, patience or tolerance, regardless of what medications or other treatments are prescribed. These patients often complain that they suffer more than before they began treatment. They try to provoke the physician to anger, to get him to scold them, to treat them harshly and severely. When they succeed, they seem to improve. This improvement is only transitory. They do not follow advice, they misinterpret what the physician tells them, they break appointments, they are continually dissatisfied, yet they insist on remaining in the physician's care. Some even persuade their physicians they need surgery. For a time, they are relieved, but sooner or later new symptoms develop, or their previous symptoms recur. These patients consult physicians not for relief of pain, but because they unconsciously seek greater pain and suffering than their original complaint provides.

Patients who have a strong dependent need may also be difficult. They return week after week, telling the physician that the drug is not helping or that they are not getting better. What they are really after unconsciously, is not the medication or therapy, but emotional support from the physician. This is what keeps them returning, but still complaining. They get some support with the drug, but never enough.

Patients who are unwilling to accept a psychosomatic explanation may continue to be treated for their symptoms with medication. It is not justifiable to tell a patient whose illness is mainly psychogenic, that he has a mild anemia, or low blood pressure, or hypothyroidism, and then treat him for that. True, it is often difficult to evaluate what proportion of complaints are due to structural changes and how much is due to physiologic change induced by mental disturbance. If as the physician continues to treat the patient, the psychosomatic concept is kept in mind, the true picture will be clarified.

It is tempting to put the blame on some factor, such as an arthritis, when the physician knows that this really is not at the root of the symptoms. Doing this is the easy way out, but it "fixes" the illness, it aggravates anxiety and it prevents the patient from really understanding his illness. I can recall a young man who had a hiatal hernia and also an anxiety state. The internist realized that many of the complaints (fear of dying, palpitation, et cetera) were not related to the hernia, and he persevered in this insistence, though it would have been easy to blame it all on the hiatal hernia. The physician's firmness here was of material help in dissolving the patient's resistance to the "psychosomatic" explanation. In another case, complaints of stiffness in the neck were ascribed to a mild cervical arthritis. The orthopedist soon saw the emotional component here, and by paying attention to that he was able to effect relief from symptoms without abandoning the position that most of the symptoms were of emotional origin. While both patients had occasional symptoms from their structural dis-

†Some psychiatrists would assert vigorously that there is a great deal of objection to giving medication along with psychotherapy. It is contended by some that this completely alters the therapist-patient relationship. Others believe that if any medication at all is given, the patient will feel that his problem is primarily physical or physiological—and that he would feel that way no matter how much he insists that he accepts the "emotional" basis of his symptoms. Of course many psychiatrists do agree with Dr. Mahoney that medication may be given. But for the record it must be noted that there is *some* objection to this by many psychiatrists—Editor.

ease, definite improvement was made in treatment of their mental state.

How about the patient who *will* discuss his problems. Can the physician help? There are several basic weapons available to him in the treatment of patients with psychosomatic reactions. Let him use these in overcoming some of the resistance of the patient.

FIRST, is the objective position of authority the physician has. This is especially true if he has had a long relationship with a family. If he can remain objective and not take sides, he can do much to clarify distorted ideas of the patient. Many physicians do not realize how powerful and effective a therapeutic weapon this relationship is.

Second, he needs some understanding to give patients about such common problems as marital difficulties, health and economic insecurity, feelings of loneliness, familial needs and parental conflict. The physician may feel that these are not medical problems and that the patient is unrealistic to ask him for help in such matters. He may say that psychiatrists, clergymen, or social workers should handle such problems. But these *are* medical problems because they relate to physical complaints. It is not only our right, but our duty to help in such problems.

The third factor is making the patient aware of some behavior on his part that was poorly clarified or not realized altogether. It is amazing how we deny the obvious. Many patients, given knowledge of their behavior by the physician, have good enough personality function left to utilize this knowledge and can help themselves.

It is sometimes feared that, by "stirring up" old emotions, we might be creating more emotional disturbance than the patient had before he came to the doctor. I do not believe that there is any validity* in this. After years of trying to alter peoples' behavior, I have developed a healthy respect for the neurotic "weakness" which is really a marked strength. It is not a ***weakness*** of functioning, but a ***distortion*** of functioning.

The fourth factor is the emotional support the physician gives to the patient. One might say, "Why should I suggest to the patient there is something disturbed about his behavior? He knows how to live as well as I do." Yes, he knows, but he is unable to do it. Again, the physician with his position of objective authority is of great help in having the patient relinquish patterns of behavior that are causing symptoms. It is as though he needs a brace or cast for a short time until the new mode of behavior begins to function well. Since these established patterns of reacting fulfill some need, both the physician and patient must be prepared for relapses and recurrences.

HERE the question might be raised, "All this sounds nice and easy, but does it really work?" The answer is: it is not easy and often (especially the first time) it doesn't work. One problem that must be faced is the time element. This must be answered on an individual basis. The physician must evaluate his own needs, and time demands; along with the necessity of doing good medical work and arrive at some compromise. I have asked general practitioners how many of their patients have a large psychosomatic element in their illness. Answers varied from 40 to 80 per cent. I have followed that question with: How many do you help? This answer varied from 40 to 90 per cent. The more of this work the physician does, the more successful at it he becomes. If he fails, he can feel that he has been vanquished by a worthy adversary, the most complex entity in existence, "the human mind."

There is always a demand for a quick way to solve these problems. While we may hope, so far none has appeared. We may find consolation in the words of a poet for the slow rate of progress in this branch of scientific knowledge.

> "Whither we cannot fly, we must go limping
> The scripture saith that limping is no sin."

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*Again, some psychiatrists will disagree. Some say that there *is* a danger in taking a patient who has somehow come to terms with past emotional conflict, and getting him to bring up all that buried material. Of course Dr. Mahoney is not recommending any such tampering with the unconscious. However, some psychiatrists take the position that amateurish attempts at psychotherapy might have such an effect.—Editor.

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DISCUSSION OF DR. MAHONEY'S PAPER

WALLACE B. HUSSONG, M.D. (Camden): Dr. Mahoney has presented a paper rich in clinical and theoretical concepts about the psychosomatic approach. He avoided the pitfalls of over-specificity and simplicity so frequently found in discussions of our subject. Rather he approached the point of undue diffusion of his subject in leading us through the realms of interviewing technic, the concept of clinical normality, problems of medical education, and the equipment of physicians for psychotherapy. He has given us not a blue-print but a guide.

From the standpoint of resistance, the paper deals almost exclusively with the resistances encountered in accepting the importance of emotional conflict in causing physiologic disorder, and to the resistances encountered giving insight about emotional factors. Don't forget though that there can be important resistance to needed drug therapy, to surgery, or other physical methods when the patient avoids the anxiety of any change in his dependent relationship to his physician or to his illness itself. The couch and the transference resistance of analytic therapy certainly has its counterpart in many rigid patient-doctor relationships which resist any change in ritual.

I would like to comment about several special patient resistances. The concept of secondary gain of illness was formulated chiefly with reference to psychoneurosis. But gains from sickness come up as a resistance to improvement in nearly all disorders. Despite the frequently conscious or near-conscious nature of such resistance, I find it equally difficult to work with as other resistances noted in our discussion.

Another resistance to change comes forth when either patient or physician recognizes the functional value of somatic disease in maintaining equilibrium for the individual. We must respect the fact that somatic illness can be a psychobiologic protection against psychosis or other pathology.

This leads to the question of immaturity and regression in regard to psychophysiological disorders. From the standpoint of total psychosomatic organization it is a moot question, whether "violent rage" is more infantile than a headache. Despite the achievements and prosperity of many individuals with psychophysiologic disturbances it seems to be a valid and usuable theory that vegetative disturbances represent immature and less adequate means of communication with the environment as compared to more active, direct and verbal expression. The achievements and ambition of these individuals has been pointed out to be largely a reaction against the underlying biologic disorder. (Examples of successful professional patients with circumscribed problems in communication directly related to psychophysiological disorders can be given if time permits.)

This leads to a resistance, or more accurately, an inherent problem in the treatment of somatic disorders. Many patients are largely limited to somatic methods and general management because there is an inherent need for care rather than a need and ability to get insight through verbal communication. Probably we benefit if we make a distinction between the resistance of the patient to the doctor's psychosomatic approach (which usually is not great) and the resistance to participation by the patient in an approach when it requires personality change. In this regard much benefit comes from the patient's feeling that a doctor is interested in doing something for him, as so frequently seen by the temporary benefit from one interview for consultation, rather from psychologic insight.

Now I realize that like Dr. Mahoney I tend to focus upon psychotherapeutic questions and this no doubt reflects the difficulty that any one clinician has for we can only view the psychosomatic approach within our own limited frameworks of reference. It seems good that we can have the viewpoint now of an internist.

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Primary Hodgkin's Disease of the Stomach*

Primary Hodgkin's disease of the stomach is a rare lesion. A survey of the literature reveals 27 well documented cases. Ten of these survived a five-year period after resection.

In 1832, Thomas Hodgkin first described lesions in the stomach and duodenum as part of a generalized lymphogranulomatous disease.[11] It was not until 1913 that Schlagenhaufer[22] reported a lymphogranulomatous lesion confined to a single organ, the stomach. Survey of the literature reveals 27 documented cases of Hodgkin's disease primarily involving the stomach. This lesion is encountered in 1 to 2 per cent of all Hodgkin's disease cases.[10,13] However, not a single case has been reported from New York's Memorial Hospital where 406 cases[8] have been treated since 1920.

Hodgkin's disease of the stomach occurs predominantly in men in their fourth to sixth decades. The symptomatology is bizarre and indefinite. The most common clinical findings are anorexia, abdominal pain, nausea, vomiting, melena, hematemesis, gaseous eructation, weight loss, and weakness. Paroxysms of fever (Pel-Ebstein) are generally absent. The blood picture and gastric analysis are normal. There are no pathognomonic roentgen findings other than an infiltrating or ulcerating lesion. The condition is rarely diagnosed preoperatively. It most commonly simulates gastric carcinoma, gastric ulcer, lymphosarcoma or hypertrophic gastritis.

A 59 year old male was admitted on March 23, 1953 complaining of epigastric pain of eight weeks' duration. The pain was continuous, nonradiating, and unrelated to eating. Occasional vomiting occurred two hours after meals. He was a well developed, thin, chronically ill appearing man, with a blood pressure of 130/78, pulse 80, respiration 20, temperature 98.6. Deep palpation of the abdomen elicited slight tenderness in the left hypochondrium. No other abnormalities were noted except for a firm skin ulcer (4 by 4 by 1 centimeter) on the lower third of the neck, the site of a burn twenty years ago. Biopsy showed this to be a basal cell carcinoma. A gastrointestinal series on April 2 disclosed giant gastric rugal folds. An incidental finding of a partial collapse in the twelfth dorsal vertebra and a narrowing of the intervertebral disc were interpreted as post-traumatic. The symptoms responded well to antacids antispasmodics, and sedatives. On gastroscopic examination the rugae appeared hypertrophic throughout. A punch biopsy of a gastric fold 5 centimeters below the cardia was reported as normal gastric mucosa. The patient was discharged asymptomatic one month after admission.

Two weeks after discharge, the patient developed intractable, progressive epigastric pain accompanied by vomiting. A gastrointestinal series on June 23 suggested more definite narrowing and curving of the antrum. The roentgenologic diagnosis was changed to antral spasm, probable an-

*From the Veterans Administration Hospital at East Orange. Dr. Fieber was, at the time of this case report, on the surgical staff at that hospital.

tral gastritis, and hypertrophic gastric rugae. The patient lost ten pounds and was readmitted to the hospital on July 23.

White blood count was 13,000: neutrophils 70%, stabs 5%, lymphocytes 23%, monocytes 1%, eosinophils 1%; hemoglobin 15.3 Grams; platelets normal; blood morphology normal; hematocrit 47 cubic centimeters. Urinalysis was negative. Serological test for syphilis was negative. Gastric analysis revealed a maximum free acidity of 61 units after the intramuscular injection of 0.5 cubic centimeters of histamine. A Hollander test indicated 88 units of free acidity after the intramuscular injection of 25 units of regular insulin. A Thorn test produced a drop in the eosinophil count from 154 per cubic millimeter to 66 per cubic millimeter. Stools were one to two plus for occult blood. Serum amylase 99 Smogyi units. Total protein 6.8 Grams per cent with an albumin-globulin ratio of 1.1. Blood urea nitrogen was 12 milligrams per cent; uric acid 3 milligrams per cent. Serum carbon dioxide was 28 milliequivalents per liter. Serum chloride was 91 milliequivalents per liter. Liver function profile was normal. Gastric aspirate was negative for tumor cells.

The patient experienced no relief of pain on a Sippy diet including supplementary antacids and antispasmodics. During a gastroscopic examination, with the patient atropinized, a dirty gray, annular membrane lying in the antrum was visualized and considered suspicious of a malignant process. On October 15, at laparotomy, a large gastric ulcer in the antrum of the stomach was seen and thought to be malignant. A radical subtotal resection of the distal three-fourths of the stomach was performed. In the process five large, firm lymph nodes, measuring up to 3 centimeters in diameter in the region of the left gastric artery were excised. A frozen section of one of these nodes disclosed Hodgkin's disease. A sixth node at the esophageal hiatus was left *in situ*. Liver and spleen appeared normal.

Further studies showed no extension of the process and no involvement of other organs. One random blood count revealed a 7 per cent eosinophilia. Sternal bone marrow was normal. The temperature curve rose slightly about once or twice weekly to levels of 100.5 degrees. Palliative radiation (3000 roentgens) was administered to the epigastrium and the dorsal spine despite the fact that roentgenologic examination failed to demonstrate evidence of metastatic involvement. Except for occasional vomiting, the patient remained relatively asymptomatic. A gastrointestinal series five months postoperatively showed a normal gastric pouch. Seven months postoperatively the patient had gained 10 pounds.

The specimen consisted of a "radically" resected stomach with a 1.5 centimeter duodenal cuff. The stomach measured 11 centimeters on its lesser curvature and 18 centimeters on its greater curvature. The serosal surface of the antrum was depressed, thickened, and covered by adhesions. In addition to the 5 large lymph nodes resected from the gastrohepatic ligament, 8 nodes were cleared from the gastrocolic ligament and omentum. The gastric rugal folds were thickened and prominent and measured up to 10 millimeters in width and height. A huge gastric ulcer 11 by 5 by 0.5 centimeters completely encircled the lumen of the antrum. The distal edge of the ulcer extended to within 1.5 centimeters of the pylorus. The ulcer margins were sharply punched out and the marginal mucosa slightly undermined. The ulcer base had a mammillated, finely nodular, pink-grey appearance. On section the ulcer base was 5 to 10 millimeters in thickness, firm and white, with yellow linear streaks. In the central portion, the ulcer penetrated through the muscularis to the serosa.

Microscopic examination of the resected stomach was normal except in the region of the ulcer. The

Figure 1. The specimen demonstrates a huge gastric ulcer. Fixation in formalin has caused it to shrink.

base of the ulcer consisted of a pyogenic membrane overlying vascular granulation tissue which extended through the serosa. The ulcer wall was composed of a well defined zone of richly cellular, well vascularized, reticulum stroma in which were enmeshed numerous lymphocytes, reticulum cells, plasma cells, eosinophils and an occasional Reed-Sternberg cell. Beyond the wall, the stomach was normal. The cellular pattern of the large gastrohepatic lymph nodes was pleomorphic, differing from the stomach by the presence of large numbers of Reed-Sternberg cells and fewer eosinophils. The 8 gastrocolic and omental nodes showed reticuloendothelial hyperplasia. The liver biopsy was normal.

One year after the operation, the patient's general condition was good.

From a prognostic standpoint, Hodgkin's disease cannot be correlated with any histopathologic classification.[24] A more accurate guide to prognosis appears to be clinical staging of the disease. Peters' classification is most helpful:[20]

Stage 1: Involvement of single lymph node region or single lesion in body with no constitutional symptoms.

Stage 2: Two or more proximal lymph node regions of either upper or lower trunk with or without constitutional symptoms.

Stage 3: Involvement of two or more lymph node regions of both upper and lower trunk with or without constitutional symptoms or acute Hodgkin's disease with no obvious lymphatic involvement.

It has been found[19,20] that about 85 per cent in stage 1, treated with radiation have a five-year survival; and from 77 to 84 per cent have a ten-year survival.

Surgery as a therapeutic measure in Hodgkin's disease has been generally interdicted, presumably on the basis that the disease is systemic. The present philosophy of treatment of primary Hodgkin's disease of the stomach is based on the premise that the lesion begins in one place and may remain localized to the regional lymph nodes.[8,25]

Surgical treatment is indicated in such situations where a diagnosis has to be established or symptomatic relief is required. Extirpation might possibly induce or prolong a state of remission and, in some cases, might conceivably effect a cure. Additional studies along these lines will be required before any conclusions can be reached.

Of the 27 cases surveyed from the literature which were treated by surgical resection (4 were given supplementary radiation therapy), 6 died in the immediate postoperative period and 3 developed a recurrence or died within one year. Eighteen were alive at least 6 months to 13 years, 10 of these surviving beyond a 5 year period. It might be noted that Marshall,[18] in addition, cited 5 cases with gastric Hodgkin's disease who lived longer than 5 years after surgical treatment. In Marshall's experience the prognosis with Hodgkin's disease of the stomach was better than with gastric carcinoma.

SUMMARY

1. A case report of primary Hodgkin's disease of the stomach is presented.

2. Survey of the literature revealed 27 well documented cases of Hodgkin's disease localized primarily to the stomach. Ten survived beyond 5 years following surgical resection.

3. The clinical features of Hodgkin's disease of the stomach have been reviewed.

4. From the literature, radiation appears to be the treatment of choice for Hodgkin's disease localized to a single lymph node region or lesion. The use of surgery in Hodgkin's disease of the stomach is primarily for diagnostic purposes or for relief of intractable symptoms. It is conceivable, however, that surgical extirpation of localized Hodgkin's disease of stomach might cause a remission of the disease or even effect a cure.

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cases treated without a muscle relaxant. Fracture rate fell to 2 per cent when a muscle relaxant was used. Fractures are three times more frequent in males (stronger muscles?). It is of obvious advantage to both patient and physician to prevent fractures.

Some of those who suffered complications have been successful in securing judgments against psychiatrists who administered the treatment. For this reason, some insurance carriers have become wary of issuing or of renewing insurance for psychiatrists who have encountered such complications. Despite the fact that convulsive treatment was therapeutically valuable to the patient suffering from melancholia, the rare skeletal complication began to loom larger and larger in the minds of both doctors and relatives. Thus, the doctor conscientiously trying to help his patient has at times been victimized by a damage suit instituted against him for a fracture which occurred while he was functioning in line of duty.

EFFORTS to find medical methods routinely succesful in preventing skeletal complications have not been fully successful in the past. Paralyzing agents used heretofore, sometimes provoked serious dangers in themselves. As a result, many abandoned such agents after experiencing deaths or nearly fatal outcomes.

However, when a *new* drug was found that produced temporary paralysis and permitted convulsive treatment with no threat of fractures, foresighted psychiatrists immediately started to use it. This drug, succinylcholine chloride* in adequate dosage produces complete but temporary muscular paralysis. Some, nowever, found it dangerous in the large doses originally recommended. A few deaths have been reported which, perhaps, resulted from dosage greater than the patient could tolerate. The brave souls who used it first soon recognized certain inherent dangers and now by careful modification[1] of the dosage and through judicious combination with two other drugs, its value and safety have been immeasurably increased.

It is essential to realize that the larger doses of succinyl* that have been advised heretofore, are not necessary to produce adequate softening. In fact the doses advised are probably twice as large as necessary. The generalization, "use 10 to 30 milligrams," could result in a catastrophe if such a dose was administered to a patient needing only 7 or 8 milligrams. We have had one astonishing case wherein 4 plus softening of the convulsion occurred with only 4 milligrams of succinylcholine,* yet prolonged apnea occurred requiring steady oxygen insufflation for considerable time before patient was out of danger.

Since electroconvulsive treatment has been in use over 15 years, most physicians know of the possibility that fractures may occur occasionally when unsoftened electroconvulsive treatment is administered. Many psychiatrists continue giving it in this way. The frequency of such fractures can be very much reduced when the Reiter electrostimulator is used, by carrying on minimal cerebral electrostimulation throughout the 40 to 60 second clonic phase of the convulsion, immediately following induction of the grand mal seizure.

This technic softens the seizure considerably, thus reducing materially the possibility of fractures. This method is also an integral part of the treatment when succinyl is used, since it induces more softening than succinyl alone, and at the same time helps eliminate the Pentothal[2] anesthesia.

The aim of this paper is to emphasize that we now possess an additional method for softening the convulsion to even greater degree—probably sufficient to eliminate all fracture complications, if no errors occur in technic. To assure this, the operator should first observe a psychiatrist experienced in administering the treatment who is well qualified in use of the method. Moderation of the convulsion in this manner does not change the good results from cerebral electrotonic therapy reported by so many psychiatrists. It is likely that many would have reported even better results

*Anectine (Burroughs Wellcome & Co., Tuckahoe, N. Y.)

1. I refer to the modifications proposed by David Impastato, M.D. of Bellevue Hospital Psychiatric Division, New York City.

2. Pentothal is an Abbott Laboratories registered tradename.

had this new method been in use earlier, because in some instances, treatment had to be interrupted before the mental illness had been brought to the remission stage, because of a fracture complication.

X-ray Records: It is essential when undertaking a program of succinyl* softened electroconvulsive treatments, to secure roentgenograms of the dorsal and lumbar spine in each case *before* treatment is started. Only by this precaution will it be possible to avoid serious errors. Scoliosis or symptomatically silent old vertebral fractures are relatively frequent findings. If you treat such a case and then secure x-rays *after* treatment, you might erroneously attribute the skeletal lesion to the electroconvulsive treatment. A pre-treatment x-ray should have been available to show that the lesion existed before this treatment was started. Even more essential is the need to determine whether decalcifying of the bones (osteoporosis) has begun or progressed to an advanced stage. If decalcification is found, it is an indispensable precaution to soften each therapeutic convulsion by using succinyl.* Persistent foot drop and other paralytic involvement of the legs have resulted from the star-shaped explosive type of vertebral fracture that may occur, when an osteoporosis riddled patient is administered even one electroconvulsive treatment without a muscle paralyzing drug. Many of our patients are already in the aging group and even more will be, as the years go on. All the medico-pharmacologic skill at our command should be called on to prevent any future example of this kind.

CASE ONE

A 75-year old woman required electroconvulsive treatment for a recurrence of melancholia. Six years before, I had induced a full remission by electroshock therapy. But this time the increase in bone softening (osteoporosis) inevitable with advancing age made it foolhardy to consider electroshock unless a softening drug was used. The x-ray report stated: "There is a generalized decalcification of the bodies of the spine of moderate degree . . . This warrants some caution in the administration of shock therapy." Accordingly, I undertook treatment with succinyl and all eleven of the treatments were adequately softened with doses from 8 to 11 mg. At no time during the 3 weeks of treatment was there any complaint suggestive of skeletal injury.

Various other examples could be cited to show how full motor function can be preserved in the aging person who requires electroconvulsive therapy, provided the convulsion is softened by succinylcholine.*

CASE TWO

A 53-year old man had been unemployed 5 years because of "nervous debility." His wife had worked all these years. He received disability insurance payments monthly. Since he had many hypochondriacal complaints and particularly since the worst of these was "severe back trouble," persistent for the 5 years of disability, obviously, it would be unwise to administer electroshock unless the convulsion was softened by a muscle paralyzing drug. Since the referring physician had already assured him emphatically that electroshock treatments could not possibly do him any harm, special precautions were imperative to assure that no new back complaints were induced by fracture complications, which might be caused by unsoftened electroconvulsive therapy.

Treatment was undertaken only because of a feeling of reassurance that fractures will not occur when succinylcholine* is used. It proved most fortunate indeed, that I insisted on this precaution, because he voiced "back" complaints following his 10th electroshock treatment, which suggested the possibility of a fracture. Yet, all convulsive treatments had been adequately softened by succinyl. Thus, when a spinal x-ray was carefully compared with roentgenograms taken *before* shock therapy was started, the radiologists [3] found no evidence of any fracture. To be doubly sure a second x-ray was secured following his 13th (and last) succinyl-softened convulsive treatment. This also showed no evidence of spinal fracture.

Treatment Technic: The Impastato modification [1] of the previous methods advocated for administering succinyl* possesses unique advantages. This consists of loading a 5 cubic centimeter syringe with succinyl* dosage first, then adding the sodium Pentothal [2] and atropine sulphate. It has been my custom to reduce the succinyl to half-strength by adding equal amounts of sterile water, since the Burroughs Wellcome preparation* is supplied in 20 milligrams per cc. strength. It is essential to give no more than necessary to produce adequate softening. To measure dosages of 6 or 8 milligrams is most difficult in a 5 cubic centi-

3. The author is grateful to roentgenologists William H. Seward, M.D. and M. Dasher Wylly, M.D. of Orange, N. J. for the skillful x-ray reports rendered in all cases before electroshock, and during the treatment course if any adverse "back" symptoms were reported by the patient.

meter syringe when the solution's strength is 20 milligrams per cubic centimeter. This is open to serious error. By reducing it to 10 milligrams per cubic centimeter I have been able to measure the dosage more accurately. This is important with the occasional case where a dose of 6 to 7½ milligrams proves adequate. If a larger dose is given, prolonged apnea will occur causing the physician considerable anxiety.

Approximately 150 milligrams of sodium Pentothal[2] solution is next drawn into the syringe followed by 1/75 grain of atropine sulfate sterile solution. Some require less Pentothal[2] (perhaps 100 milligrams) while an occasional patient needs more (perhaps 175 or 200). If more atropine is needed to reduce salivation, it is helpful to give a subcutaneous dose of grain 1/150 about 15 to 30 minutes before the treatment.

Dosage Determination: Every patient receives a test dose of 5 milligrams of succinylcholine* to determine its effect, before the first electric treatment is administered. This is less than a therapeutically effective dose. By observing this test the psychiatrist soon learns to estimate with reasonable accuracy the dose that will accomplish adequate softening. Since the choline-esterase of the blood neutralizes 5 milligrams of succinyl completely in two minutes or less, it is safe to proceed with the first treatment after allowing a five-minute interval following the test. Since this potent drug has some dangers especially when larger dosage is used, it is imperative not to estimate too high. Dosage for subsequent electric treatment is adjusted up or down in accordance with the degree of moderation of the convulsion apparent in the first treatment.

My policy is to use 7 or 8 milligrams for the first treatment if the test shows very little muscular paresis. If marked prostration occurs, only 5 milligrams are used initially. If you feel that these doses are insufficient, you will be pleasantly surprised to see how frequently they produce adequate softening. In fact, by using only 5 milligrams for the treatment the first time an old case is started on succinyl (one that has been receiving maintenance unsoftened electroconvulsive therapy for a long time) many patients will be 3 plus softened. Often 6 milligrams produces the full 4 plus degree of softening.

Oxygen Administration: Oxygen must be available for immediate administration during the apnea following the convulsion, when succinyl* is administered. The patient must be carried on artificial oxygenation through a period ranging from one to three minutes in nearly every instance. Sometimes the patient will breathe spontaneously if the drug dosage is low. Even then, respiratory embarrassment is so obvious that the physician is relieved when oxygen is supplied. Some psychiatrists have used the "positive" oxygen insufflation apparatus known as the Neophore.® Others prefer the rubber bag insufflation method used by anesthetists. I have found that the Positive-Negative apparatus[4] gives me greater reassurance during the trying moments before the patient resumes normal respiration.

I AM indebted to seven doctors for emphasizing the "Importance of Negative Pressure Phase in Mechanical Respirators" in the May 16, 1953 issue of the Journal of the American Medical Association. Study of this article by Maloney, Elam, Handford, Balla, Eastwood, Brown and Ten Pas will assure a better understanding of the manner in which the positive-negative resuscitator gives one the confidence to use succinyl, a drug which briefly paralyzes the muscles of respiration and all other muscles for a short time.

By means of positive-negative insufflation[4] of oxygen into the temporarily lifeless lung, the patient's life is sustained during the short period required for the choline-esterase of the blood to neutralize the succinyl, thus permitting the body muscles to resume their normal functions, including respiratory movements. Maloney *et al.*, point out that "devices that employ positive pressure only were found to

4. The "Reviv-A-Life" — oxygen resuscitator - aspirator-inhalator is distributed in New Jersey by Ralph & Son, Inc., East Orange, and distributed nationally by Continental Hospital Service, Inc. of Cleveland, Ohio. This apparatus will inflate and deflate the lungs in a rhythmical manner within the safe limits of 14 millimeters of positive pressure and 10 millimeters of negative pressure.

cause a fall in blood pressure and cardiac output, sometimes of sufficient magnitude to threaten the life of the patient," and that "the addition of a negative pressure phase during expiration improves systemic blood flow." Because of these factors, a life may be saved by using the positive-negative respirator in all cases.

In the most cyanotic patient with complete apnea you will see good color return to the face after a few puffs of oxygen from this resuscitator. There are occasional patients, however, who have more prolonged throat paralysis with prolapsed tongue valve action. They require insertion of an airway before the oxygen can enter the trachea. No time should be lost in inserting the airway when indicated.

As soon as the patient has taken a few normal respirations, he is turned on his side while still unconscious, to assure drainage of excess saliva, thus preventing a mucus plug from interfering with respiration.

CASE THREE

A very obese woman of 55 who had gained most of her excess weight in recent years was in need of another course of electroshock therapy. She had been given a course of treatment 8 years before while in a "melancholy" state,when she seemed a good risk skeletally since she weighed about 150 pounds and was in her mid-forties. This time, nearly a decade older, with presumably more brittle bones, she weighed nearly 225. This increased considerably the danger of fracture if she received full strength convulsive treatments. Obviously, succinylcholine was indicated.

Accordingly electroshock was started and it was learned that doses of 11 to 13 milligrams were quite adequate to produce a 4 plus degree of softening, thus assuring that a fracture could not occur. Her course of 12 treatments was completed without mishap of any kind. Certainly here is striking evidence that larger doses are not necessary as advised heretofore.

CASE FOUR

A 59-year old woman required daily electroshock after a suicidal attempt by inflicting multiple puncture wounds. Her age and the multiple wounds made it essential to soften the convulsions. Doses of 8 to 10 milligrams of succinyl produced 3 plus softening while 13 milligram doses produced 4 plus softening. She was given 10 convulsive treatments with no mishap.

CASE FIVE

A 65-year old man who had always had a "happy" disposition developed a severe melancholia accompanied by intense fear of losing the position he had held for many years. Although EST was obviously indicated the author was loathe to administer it without a muscle relaxant because he had a history of back injury from an automobile accident 17 years ago (diagnosis given was "slipped disc"). He was observed for one month and during that period the melancholia became progressively worse with intense self-depreciatory delusions pointing to an involution melancholia. Since electroconvulsive treatment seemed imperative it was undertaken with succinyl. X-rays showed intervertebral osteoarthritis, scoliosis and a wide angle lumbosacral joint (probable cause of his chronic low back pain). He received 13 EST over a period of 7 weeks, all of them adequately softened by succinyl in dosage varying from 7 to 11 milligrams. At no time were there any back complaints during the course and there was complete recovery from his melancholia with resumption of his former happy disposition, and his work.

The reader will note that the case reports presented are all in persons over 50. In these cases succinyl is a "must" since bone softening is more prevalent in older persons. However, fractures occur not infrequently in younger persons too. It follows that everything said herein applies to younger persons under treatment, since our aim must be to eliminate fracture complications *entirely* as a hazard in this treatment. *Succinyl should be used for every patient who gets electroconvulsive treatment, irrespective of age.*

It is most satisfying to observe the minimal muscular force evident during the succinyl-moderated convulsion, in patients who need maintenance treatment because of repeated recurrences of psychotic illness. In some who formerly had very powerful convulsions, the decrease to an almost imperceptible movement gives the operator a tremendous sense of relief. Recognition of the possibility of a fracture during one of these especially forceful convulsions is a persistent hazard. Many such cases require only 5 to 7 milligrams to produce a 4 plus softened convulsion.

A few years ago, some psychiatrists asserted that electroconvulsive treatments should *not* be administered in the psychiatrist's office. All patients described in this article (and a great

many others not described for lack of space) were treated in my private office. All the safeguards available in any hospital for the patient's safety and protection are provided. In 15 years of administering electroshock therapy I have had no fatalities. This record has unquestionably been achieved by many other psychiatrists throughout the nation, wherever adequate precautions are taken. In considering this comment, it should be kept in mind that if foresighted psychiatrists had not provided such outpatient facilities, our institutions which are just as crowded now as they were 15 years ago, would necessarily be called upon to carry a much greater case load today.

CONCLUSIONS

1. The Impastato modified method of administering "Anectine" (succinyl*) offers the safest and surest method now known for preventing fracture complications during electroconvulsive therapy.

2. With proper technic, adequate assistants, and modern apparatus this method can be used safely in the psychiatrist's office. It should attain widespread usage.

3. In New Jersey, where more than 100,000 electro-convulsive treatments are administered each year, if we estimate the average number of treatments at 10 per patient, if succinyl softening was used in all cases receiving EST, the possibility looms that as many as 2000 fractures might be prevented (20% of 10,000 patients) but even if only 100 are actually prevented this procedure becomes of inestimable value as a technic in preventive medicine.

4. Insurance carriers will find that the increased safety to the patient will reduce to a minimum the number of damage suits filed because of fracture complications.

5. Psychiatrists can now look forward with confidence to the day when securing professional liability insurance will no longer be difficult if they prepare themselves to carry out electroconvulsive therapy with this fracture-preventing precaution.

6. The peace of mind which accrues to the psychiatrist who realizes that the likelihood of a complicating fracture has been eliminated when he uses this new method of softening electroconvulsive therapy, is a tremendous boon.

7. This new technic marks one of the most significant developments in psychiatry since the discovery that electroconvulsive therapy is a specific for "melancholia."

130 Bellevue Avenue

Management of Anxiety in Poliomyelitis

During a poliomyelitis outbreak, anxiety-tension states prevail in a large segment of the population. Patients and their parents are especially affected. From the therapist's viewpoint, this problem deserves as much attention as the physical symptoms of the disease. Control of the anxiety makes the whole program of therapy easier and more fruitful. Chief measures for this purpose are (1) education, (2) reassurance, (3) mild sedation, and (4) avoidance of hospitalization whenever possible.*

*Boines, G. J.: GP 10:38 (August 1954).

Victor H. Miles, LL.B.

Newark

"Must I Testify in Court"

A doctor is at the call of the public, and not the least of his public duties is to help in the administration of justice by making available to the courts his special knowledge of a case. One phase of this is here discussed by a New Jersey trial attorney who is also active in the field of legal journalism.

A subpena is served upon you to testify at a trial on behalf of a patient who sustained injuries in an accident. Are you aware of your responsibility?

In the usual case, the attorney requests your appearance without a subpena. However, where you have manifested reluctance to appear willingly you are amenable to the process of the court by the service of a subpena and the payment of a nominal witness fee. This requires you to appear early on the day of trial, wait until the case has been assigned to a judge, and then wait until your testimony is required. Several hours or even days may elapse with a substantial loss of income for which you are not reimbursed. Offer your services promptly and affably and these consequences will be avoided.

The practitioner's aversion to court is, perhaps understandable, still his testimony may be indispensable for an adequate appraisal of his patient's injuries. No person other than the physician may testify about his diagnosis, treatment, prognosis and reasonableness of his bill. If the litigant successfully hurdles the obstacle of liability, the quantum of damages depends upon proof of medical injuries and expenses, past, present and future. Without the doctor's testimony, he may be limited to a nominal verdict of six cents, an award which merely sustains his contention of liability.

Doctors who have found themselves, as litigants, requiring the aid of other physicians, are fully aware of the importance of medical evidence and thereafter are most gracious and sympathetic in furnishing testimony for the benefit of patients. An appreciation of the difficulties confronting the litigant and his attorney will aid the administration of justice. Your cooperation is essential. It will foster a cordial relationship with the members of the bar and a respectful gratitude from the patients.

Sometimes a doctor refuses to testify until his bill has been paid. If the patient is indigent, the bill is uncollectible. The doctor can be magnanimous by offering his testimony and obtain payment of this bill if there is a successful recovery. Or, the doctor can be obdurate and refuse to testify. In that case the advocate has no alternative but to serve a subpena. If

the patient is neglectful rather than impecunious, the judge in the exercise of his discretion and upon proper application may aid the doctor. He can demand payment of the bill before requiring the doctor's testimony. Proper application may be made by a telephone call or (if time permits) by a letter to the judge's secretary informing him of the facts.

Usually when you are handed a subpena, it was issued by the adverse party who anticipates that your testimony will be helpful to him. If a fee does not accompany the subpena you may ignore it.

If you must (or want) to appear for either side, it is suggested that you immediately call the attorney and request that you be placed "on call." By leaving telephone numbers where a message can be received and relayed, the attorney will have you summoned only when the phase of the trial requiring your testimony has been reached. Thus, soon after arrival at the court house you will be placed on the witness stand. If your schedule calls for your attendance at a surgical operation, your testimony may be received out of order, by special permission of the court.

Service of the subpena is effective if the process server delivers it to the doctor personally. Service upon your wife at home, or a nurse, receptionist or secretary at your office is insufficient.

•

THERE are two types of subpenas. A *subpena ad testificandum* merely requires your oral testimony. A *subpena duces tecum* requires that you testify and also bring with you the pertinent records. Regardless of which type is served, it is best to have available in court all of your original records. This may be a single card with chronologic entries or several independent and unrelated memoranda. The latter may be collated for the purpose of clarity and to reveal continuity of treatment. But always have the original notations with you.

Sometimes, just before trial, a doctor finds that his records are inadequate, misleading, incomplete, or illegible. He is tempted to do one of two things: (a) to make a new record of his contact with the patient and to destroy the original; or (b) to interpolate supplementary data within his records or to affix new material to them. The temptation to do either should be firmly resisted. It is foolhardy to tamper with original records.

Your records and testimony should be regarded as an integral part of the patient's treatment for a complete recovery.

10 Commerce Court

Discontinuance of Amebiasis Fixation Test

Up to now, the State Laboratories have accepted blood specimens for forwarding to the Communicable Disease Center to aid in the diagnosis of amebiasis. The following information has been received regarding this test.

"Due to the conflicting evidence on the value of the complement fixation test in the diagnosis of amebiasis, the Communicable Disease Center is discontinuing this as a reference diagnostic service. Although certain research workers have reported satisfactory correlation between the test results and clinical amebiasis, the experience of others indicates that the test has not reached the degree of reliability necessary for a routine diagnostic procedure.

The State Laboratories are therefore not in a position to continue this service to physicians.

State Activities • • •

Trustees' Meetings

November 7, 1954

At its November 7 (1954) meeting, the Board of Trustees of The Medical Society of New Jersey voted to:

—approve President Lance's nominations to the Commissioner of Labor for appointment to the Committee to Study Rehabilitation Needs.

—approve for exhibit to local groups the A.M.A.-endorsed film *Career: Medical Technology.*

—continue its cooperation with the New Jersey Safety Council, and to name Mr. Nevin as the President's representative in attending meetings of the Board of that Council.

—authorize the Section on Metabolism to program the J. Fred Johnson Award essay at the 1956 meeting.

—endorse the activities of the State Dental Society in promoting the Dental Health Conference.

—establish within the Board an *ad hoc* committee to meet with an analagous committee of the Bar Association to discuss problems in medical testimony.

—receive and incorporate in its minutes a letter from Dr. Vincent P. Butler reading as follows:

"In an article published in the *Newark Evening News* on October 28, 1954, it is erroneously stated that I have made public statements conflicting with the Medical Society's official position.

"Dr. Elton Lance, President of The Medical Society of New Jersey is quoted as saying that statements by a past and future president of the Society criticizing the state Medical School proposal do not represent the Society's position. And further on in the article after identifying me as the future president to whom he is referring, is quoted as saying 'during the last few weeks these two members of its Board of Trustees have made public statements conflicting with the Society's official position'.

"I wish most emphatically to deny both these allegations and am requesting that the official records of The Medical Society of New Jersey have incorporated in them this denial. And further that they contain this statement by me that I have never 'during the last few weeks' or at any other time made statements criticizing the medical school proposal or conflicting with the Medical Society's position.

"It is my considered judgment that publication of this article has done me an injustice as President-Elect and also rendered a disservice to The Medical Society of New Jersey. And so I am now requesting the Board of Trustees at their meeting on November 7, 1954, to take appropriate measures to inform the members of The Medical Society of New Jersey of the incorrectness of these statements and thereby reassure them that the confidence they have reposed in me by honoring me with the Society's highest office has not been misplaced.

VINCENT P. BUTLER, M.D.

—send its thanks to the Atlantic City Convention Bureau for its cooperation in planning the A.M.A. House of Delegates dinner there on June 6, 1955.

—rescind its action of September 26, 1954, in locating the 1957 Annual Meeting at the Hotel Ambassador (Atlantic City), and voted instead to hold that meeting April 28 to May 1, 1957 at Haddon Hall.

—approve revisions in the fee schedule for private care of Veterans Administration beneficiaries by local physicians.

—recommend that surplus funds of the Society now in non-interest bearing accounts be invested in insured bank accounts, Savings and Loans and in Government bonds.

—receive from the Medical-Surgical Plan replies to items relayed to it by the 1954 House of Delegates. (These are summarized on page 91 this JOURNAL.)

—reject a request from the Woman's Auxiliary for authority to support the National Citizens Committee for the World Health Organization.

—re-affirm its approval of the State Health Department's diabetes program and of the decisions of the Governor's Conference on Diabetes.

—authorize a survey of medical society opinion about the possible integration of Blood Bank Commission functions with State Society activities.

December 19, 1954

At its December 19, 1954 session, the Board of Trustees:

—approved President Lance's re-appoint-

ment of Dr. S. W. Kalb as our representative to the New Jersey Nutrition Council.

—named Dr. Arthur Mangelsdorff as our representative to the Annual Industrial Health Congress.

—approved of the naming of U. S. Senator Clifford Case as speaker at our 1955 Annual Meeting, and noted with pleasure his acceptance of the invitation.

—re-appointed Mr. Nevin as Executive Officer.

—directed that there be distributed to our component societies copies of Palye's book *Compulsory Medical Care and the Welfare State.*

—approved the Treasurer's report and complimented him on the implementation of our investment program.

—created a special committee to study and, if necessary recommend revisions in, the New Jersey 12-point program as originally presented in 1950.

—authorized a contribution of $5,000 to Medical Service Administration.

—approved a proposal to submit to the State Department of Banking and Insurance an amendment to Medical Service Administration's Certificate of Incorporation. This, if accepted by the Department, would remove the insurance feature in the Certificate and provide greater operating freedom.

—adopted January 15, 1955 as closing date for the members' poll on allocation of surgical fees under Medical-Surgical Plan.

—re-affirmed its endorsement of the Society for the Relief of Widows and Orphans of Medical Men in New Jersey and authorized more promotion of that Society through channels of The Medical Society of New Jersey.

—approved the report of the Executive Officer.

—approved in principle the reports of the following committees: conservation of vision, maternal welfare, school health, medical research.

—endorsed the proposal to provide an Assistant to the Executive Officer, and authorized a study of the budgetary implications of this proposal.

—agreed to cooperate with the Amalgamated Meat Cutters Union in developing a nationwide program to secure more effective poultry inspection and regulation.

—named Dr. David Allman as our representative to the A.M.A. Congress of Medical Education and Licensure.

—authorized publication of the letter* from Dr. Vincent Butler stating his position on the matter of a medical-dental school; and placed in the record a statement that "the Board of Trustees is perfectly satisfied with Dr. Butler's activities in conjunction with the medical-dental school project, and as an indication of that satisfaction, has adopted a vote of confidence in him."

—adopted a statement to the effect that "the general opinion of the Trustees was that any elected officer of the Society who acts in opposition to the established policy of the House of Delegates and the Board of Trustees, is guilty of an act hostile to the Society."

—adopted a resolution of condolence on the death of Mr. R. Tait Paul, the Bar Association's liaison representative with The Medical Society of New Jersey.

—voted to ask the Governor to name a physician to the Board of Control of Department of Institutions and Agencies.

Communication from Medical-Surgical Plan

At its 1954 session, the House of Delegates voted to ask Medical-Surgical Plan about:

(1) Possible fee payments for physicians assisting at surgical or obstetrical procedures;
(2) Allowance of the same payment for emergency medical or other emergency office procedure as is allowed for surgical emergency procedures in the office;
(3) Endorsement of group clinics;
(4) Organization of blind persons into groups eligible for Plan benefits; and
(5) Possible inclusion of consultants' services in available benefits.

The Plan's reply, as delivered to the November meeting of the Board of Trustees was:

1. *Payment of fees for physicians assisting at either surgical or obstetrical procedures—*

The Plan reviewed its past experience with payment for services of surgical assistants, which was unsatisfactory because of excessive utilization. Separate payment of surgical assistants is an uninsurable risk, except as an apportionment of the total available surgical benefit.

*This letter is published on the previous page.

Under the terms of its Enabling Act, the Plan cannot transact business in any county if less than 51 per cent of the eligible physicians in such county are participating physicians. It is necessary for the Plan, therefore, to determine in advance whether the profession in any county objects to the implementation of the Resolution in that County. Approval has been given to polling Plan participating physicians to ascertain from them whether they will go along with the proposed apportionment of available surgical benefits.

2. *Allowance of same payment for emergency medical or other emergency office procedures as is allowed for office emergency surgical procedures—*

Any further expansion of coverage for office services would require an increase in contract premium rate. The Plan cannot recommend that the scope of coverage outside of hospitals be so increased under the current contract.

3. *Group clinics could do much to relieve overcrowding in hospitals if their medical and surgical treatments were endorsed by MSP and other insurance plans—*

The following services of an eligible physician rendered to an eligible person outside of an approved hospital are eligible for Plan payment under the terms of the Plan's subscription contract:

1. Eligible surgical services (*not* medical or obstetrical services) of an emergency nature, occasioned by an accidental injury, rendered within 48 hours after the accident. Plan payment would be in accordance with the Plan's Schedule of Payments, but not exceeding $25 in connection with any one accident.
2. Services for removal of tonsils and adenoids.
3. Obstetrical services in eligible cases under Family Subscription Contract.

Such services are eligible when rendered in a group clinic.

4. *That the request of the State Commission of the Blind stating it would appreciate any effort by the Medical Society toward making blind persons (as a group) eligible for benefits of the Hospital and Medical-Surgical Plans—*

The following observations are pertinent to this recommendation:

1. Group enrollment is limited to persons at place of employment or to such groups as lawyers, ministers and physicians, because when enrolled as a group they afford a cross section of risk, making possible a lower Contract Rate than is practical under non-group enrollment, where selection against the Plan is greater.
2. The blind as a group not only do not afford such cross section, but actually are a substandard group in which (in accidental injuries, for example), the risk might be higher even than in non-group enrollment.
3. The Plan is not legally in position to give lower rates on a discriminatory basis so far as the remainder of subscribers are concerned.
4. Possibly the matter of protection for the blind, as a group, should entail study along the lines applicable to other present uninsurable risks, such as the over age group, the chronically ill, the unemployed and the indigent.

Dr. Allman reported that the AMA Council on Medical Services is working on this problem, and it is being considered at the national level.

5. *Inclusion of consultants' services and development of criteria for recognition of consultants.*

Action in this matter by the House of Delegates was taken in connection with a new series Contract, one of which was *not* to include consultation as an eligible service. It is the consensus of MSP that consultations are *not* a practical insurable risk under a Plan Subscription Contract. It has been decided not to include consultations as an eligible service under the new Subscription Contract.

The present Plan Subscription Contract carries no specification of qualifications, and no such specification can be insisted upon in absence of the Contract provisions.

Erratum

On page 537 of our December JOURNAL, the Mercer Hospital of Trenton is listed as approved for residency in psychiatry. This should have referred to the State Hospital in Trenton, and not to the Mercer Hospital. The Mercer Hospital is approved for residencies in internal medicine, pathology, radiology and surgery.

Announcements • • •

Plastic Surgery Awards

Annual cash prizes totalling $1,750 for winners of the Scholarship Contest sponsored by the Foundation of the American Society of Plastic and Reconstructive Surgery, have been announced by Dr. Jacques W. Maliniac, chairman of the Board.

The prizes—$1,000 to the first award winner and $750 to the second are in addition to the scholarships with full maintenance provided in plastic surgery centers. Foreign award holders receive $200 for local travel expenses in addition to full maintenance.

Scholars are chosen from essayists in the Foundation's annual contest.

For more details, write to the American Society for Plastic Surgery at 30 Central Park South, New York 19, N. Y.

Heart Meeting in Newark

March 16 is the day; 2 p.m. Wednesday afternoon is the time; the Mutual Benefit Auditorium is the place (that's at 300 Broadway in Newark) for the sixth annual scientific session on heart disease. All doctors are welcome to take part in this compact high-level graduate course in cardiology. Here are the speakers and topics:

2 p.m.—Dr. H. K. Hellerstein of Cleveland: "What Can the Cardiac Do?"

2:35 p.m.—Dr. David Zion of Philadelphia :"Significance of the Six-Foot Plate."

3:10 p.m.—Dr. Robert Wilkins of Boston: "How to Handle a Hypertensive."

3:45 p.m.—Dr. Wilbur Duryee of New York: "How to Manage a Peripheral Vascular Disorder in your Own Office."

4:15 p.m.—Dr. Lewis Dexter of Boston: "How to Recognize Congential Heart Disease."

This useful program is sponsored by the New Jersey Heart Association. For more details write to Dr. Arthur Bernstein at 668 Clinton Avenue, Newark (8), N. J.

Course in Tumor Management

The Memorial Center for Cancer and Allied Diseases is offering an intensive three-day course in diagnosis and management of benign and malignant tumors, with emphasis on tumors in children. The course will be held on April 27, 28 and 29 at the Memorial Center. The fee is $35. For more details write to the Director of Pediatric Service, Memorial Center, 444 East 68 Street, New York City.

Local Course in Chest Diseases

A graduate course in chest diseases readily available to New Jersey physicians is announced for March 1954. Lectures, demonstrations and seminars will be held on Wednesday afternoons March 9, 16, 23 and 30 at the Essex House, Lincoln Park, Newark. This is sponsored by the American College of Chest Physicians. Fee for the entire course is $25. For details, write to Dr. A. A. Peckman, 2511 Hudson Blvd., Jersey City 4, N. J.

Symposium on Antimetabolites

Announcement is made of a one-day symposium on antimetabolites to be held Tuesday, March 1, at the Biltmore Hotel in New York City. Talks are scheduled on the antagonists to thiamine, vitamin K, purine, vitamin B and riboflavin. For full program write to Dr. R. S. Goodhart, National Vitamin Foundation, 15 East 58 Street, New York 22, N. Y.

Aero Medical Association

The Aero Medical Association will hold its next scientific session at the Hotel Statler in Washington on March 21 and 22. An extensive program of scientific papers is scheduled, including one on physiologic aspects of binocular vision by Dr. Louis F. Raymond of East Orange. For more details write to Dr. R. J. Benford, P. O. Box 1607, Washington 13, D. C.

Intensive Neurology-Psychiatry Course

The Essex County Overbrook Hospital (at Cedar Grove) has been named as the place for an intensive high-level course in psychiatry and neurology sponsored by Rutgers University. The course starts on March 14, terminates on June 24, 1955. Classes are from 4:15 to 6:45 p.m., Monday, Wednesday and Friday afternoons at Overbrook. The first part of the program is devoted entirely to neurology, and ends on April 20. The rest of the course focuses on psychiatry. The neurology part includes neuro-anatomy, neuro-pathology, neuro-physiology, neuro-radiology and clinical neurology. The psychiatry part covers technics, all major psychoses, the psychoneuroses, all treatment modalities, anthropology, social work, clinical psychology, psychodynamics, biologic aspects of psychiatry, personality development, research design and psychosomatics. Tuition fee is $100 for the neurology course and $125 for the psychiatry course; or both together, in a single package, $200.

For enrollment forms, write to Extension Division, 77 Hamilton Street, New Brunswick, N. J. For information about the scope of the course, communicate with Superintendent, Essex County Overbrook Hospital, Cedar Grove, N. J.

Physical Medicine Award

A cash award of $200 and a gold medal will be the prizes to the winner of the physical medicine and rehabilitation contest. These prizes go to the best manuscript submitted by medical student, intern, resident or graduate student in the field of physical medicine and rehabilitation. The deadline is June 1, 1955. For details write to the American Congress of Physical Medicine and Rehabilitation, 30 North Michigan Avenue, Chicago 2, Ill.

Philadelphia Graduate Institute

For a registration fee of $10 any physician may take part in the intensive 3-day graduate course prepared by the Philadelphia County Medical Society. Beginning on March 29, this program will cover such subjects as hypertension, orthopedic deformities, x-ray diagnosis, geriatrics and sterility.

For further information write to Dr. L. M. Tocantins, Philadelphia County Medical Society, 301 South 21 Street, Philadelphia 3, Pa.

Obituaries • • •

DR. WALTER F. PHELAN

On Christmas Eve, 1954, Dr. Walter F. Phelan, a Union County medical leader, died. Dr. Phelan was medical director of St. Elizabeth Hospital and a past president of the Union County Medical Society.

Born in Yonkers in 1895, he was graduated from the Cornell University Medical College in 1920. Two years later he came to New Jersey and opened an office in Elizabeth. He became active almost at once in St. Elizabeth Hospital, eventually becoming medical director and chief of staff. He also served several terms as a member of the Board of Education of the city of Elizabeth. He was a general surgeon on the staff of all three hospitals in Elizabeth and he was active in the New Jersey Surgical Society.

Dr. Phelan was a member of the state medical society's committee on legislation and was an alternate delegate to the American Medical Association.

DR. JOHN J. SHEEDY

One of Union County's leading otologists died on December 7, 1954 with the death on that day of Dr. John J. Sheedy. Born in Philadelphia in 1903, Dr. Sheedy was graduated from the medical school of Temple University of that city in 1929. After his internship, he took a residency in otology and laryngology at the New York Eye and Ear Infirmary and did postgraduate work in that specialty at the University of Indiana. He then entered the Air Forces, being promoted to major and working at his specialty in the South Pacific. After leaving the Air Forces, he came to Plainfield, N. J., where he entered the private practice of otolaryngology. He was a diplomate of the American Board in that specialty and a Fellow of the American Academy of Otolaryngology. Dr. Sheedy was active in the affairs of the Union County Medical Society, and was the consultant in E.E.N.T. at Muhlenberg Hospital.

Authors' Clinic • • •

Triteness Can Be Deadly

The next time I see or hear "$64 question," I'm going to scream. Once a meaningful and witty phrase, it has become shopworn from over-use and now is a defaced and shoddy conversational currency. So it is with many phrases found in medical manuscripts: "postmortem revealed . . . " or "high index of suspicion . . ."

It is easy to fall into the use of these trite phrases. It's easier to pick a commonplace expression out of the stockroom than to conjure up a fresh phrase. It's easy to write "The first step is to do a thorough physical examination." That takes no effort on the part of the author. But that word "thorough" in connection with "physical examination" is an outworn stereotype. Everybody tells everybody to do a thorough examination. Why not think a little and come out with a brighter adjective? A *meticulous* examination, for instance, or a *punctilious* one . . . anything except that knock-kneed, limping word "thorough." You put sparkle in your manuscript when you avoid clichés.

Readers are weary of officials who want to find the *grass-roots* sentiment by *keeping their ears to the ground.* Why must an autopsy always *disclose* a certain finding? Are you not tired of being told solemnly to *cultivate a high index of suspicion?*

Here are some more common-place phrases, spavined and limping: ways and means, venture an opinion, labor the point, it proved to be, suffice it to say, to all intents and purposes, all to the good, at the eleventh hour, last but not least. (I never came across a doctor-author who used the cliché "kill or cure" though). You have to fight to avoid these hackneyed phrases, because they come naturally to one's typewriter. So it is easy to slip into the over-use of stereotypes. But, to perpetrate one final cliché: *facilis descensus Averni.*

The First Sentence of a Medical Article

Some day you are going to write a medical paper—or write another one. If you don't want that paper buried in the library, you had better catch the reader's interest. You have to do that in the opening sentence. If you don't pack a punch in the lead sentence, most of the readers who leaf through the journal are going to skip your opus.

Compress into the opening paragraph the final conclusion of the article. Extract from that the one most dramatic item, and use it as the first sentence.

Suppose, for instance, you are reporting on the successful treatment of herpes zoster by injecting muscatine. A good opening would be:

"The pain and discomfort of herpes zoster is swifty relieved by injecting muscatine. This new drug was found to be safe, fast-acting and productive of long-term results in 80 per cent of the patients treated with it . . . "

Most authors, unhappily, prefer a historical, statistical, or definitive opening. These are all bad except under special circumstances. Here, for instance, is the historical opening.

"In 1892, Schmuck isolated the active principle muscatinus iowensis from the *Cassia Occidentalis*, commonly known as stinkweed. Two years later, Konrad Pippickus, working in Wolfram's laboratory, refined the active principle and produced . . ."

This is scholarly but it bores the reader. Save this kind of paragraph for the small type in the middle of the article.

The statistical opening can be even more boring unless the author knows how to pull the dead figures out of the column and make them stand up and talk. For instance, here's a sleep-producing statistical opening:

From 1944 to 1949, the Pelvic Canal Hospital had 1562 live deliveries on its obstetrical service, and

31 therapeutic abortions. The therapeutic abortion rate was 1.98 per cent. By contrast, during the semi-decade from 1950 to 1954, there were 1887 deliveries and only 18 therapeutic abortions, an abortion ratio of 0.92 per cent. The maternal death rate was 0.94 per cent in the first semi-decade, since there were 14 maternal deaths then in 1562 live deliveries. During the 1950-54 period, there were 9 maternal deaths in 1887 live deliveries, which is a maternal death rate of 0.47 per cent. Thus . . . "

If you have read all this, it probably means that you are a masochist. What the author has to do here is to isolate the dramatic fact and put that in his lead. The dramatic fact here is that there were fewer maternal deaths when they did fewer therapeutic abortions. So the lead could be:

"Maternal death rate tumbled from 94 to 47 per ten thousand when the obstetrical service adopted stricter indications for therapeutic abortions."

Note these devices to hold reader interest: (a) The fractional percentages like 0.47 per cent are avoided. Instead the ratio is raised from "per hundred" (per cent) to "per ten thousand" in order to get rid of the decimal points. It is easier to visualize a drop from 94 to 47 than it is to visualize a drop from 0.94% to 0.47%. (b) The vivid verb 'tumbled' is used instead of the flat word 'fell.' (c) Out of the welter of figures, the one dramatic item—fall in death rate—is isolated and used in the lead.

Any statistical item may be made dramatic, because if it is worth reporting at all, it must have a story to tell. Recovery rates upped, death rates lowered, disability periods reduced, morbidity incidence increased or decreased and so on.

Similarly a definition is a poor opening except under unusual circumstances. Return to the use of muscatine in herpes zoster. Suppose the author opened his paper with:

"Herpes zoster is an idiopathic affection marked by a unilateral vesicular and herpetiform exanthem along the dermatome of a cutaneous nerve . . . "

If the reader is a physician, he does not need this definition of shingles. If he is a layman he will not understand it. The rule is simple enough. If your expected reader should know the term, don't define it. If he cannot be expected to know it, then you have to define it, but (a) define it in simple English, and (b) if at all possible, place the definition in a second or later paragraph. For instance, the average medical reader cannot be expected to know what is meant by sympus dipus, nor is he much enlightened if this is defined as "A form of sirenomelus with bipedal fusion." Since you have to start this paper with a definition, the best plan is to write the definition in simple English, thus: "Sympus dipus is a monster with the two feet fused together."

THE safest rule is, I repeat, to compress and dramatize the conclusion and use that as the opening sentence. Remember, too, that a catalog does not bristle, and a catalog-like recital of facts is a dull opening. For example:

"Many drugs have been recommended for the treatment of migraine. Schlesinger[1] advises calcium. Lyons[2] recommends duodenal drainage. Miller[3] reports good results with duodenal drainage. Lennox[4] recommends ergotamine. Vaughn[5] believing that allergic factors are responsible, seeks to desensitize the patient. Tompkins[6] is satisfied that all migraine is of emotional origin and reports good results with psychotherapy. I have tried all these and find none of them consistently and reliably helpful. The most useful drug, in my hands at least, has been theophyllin stannate . . . "

This dreary listing of remedies makes dull reading. What is the conclusion? That theophyllin stannate worked—and that the other drugs didn't. Here then is the proper opening:

"Theophyllin will relieve migraine when all other drugs fail. This, at least has been my experience; and I have used ergotamine, calcium, duodenal drainage, psychotherapy and allergic desensitization . . . "

Note that this is dramatic. It is clear cut. There is plenty of time in the body of the article for the exceptions, side-effects and contra-indications. This opening sentence offers the reader promise of something immediately useful, whereas the "catalog" style of opening did not.

Try it on your next paper. Remember, you don't catch a fish with a dull hook.

HENRY A. DAVIDSON, M.D., *Editor*
THE JOURNAL.

County Society Reports • • •

Cumberland

Under the chairmanship of the president, Dr. Frank J. T. Aitken, the *Cumberland County Medical Society* met on December 14, 1954 at the Richards Farm in Bridgeton.

During the short business meeting the transfer of membership of Dr. Delmo E. Mattiola, Landisville, from the Atlantic County Medical Society to Cumberland was voted upon favorably.

The Diabetic Detection Drive under the chairmanship of Dr. Leonard Scott, Bridgeton, was an unqualified success. Dr. Scott was given a vote of thanks for the time and efforts he made in completing the project. Six thousand dry-paks were distributed in appropriate places chosen with thought and care by Dr. Scott. At no other time has such a drive been so well supervised, so carefully planned and so successful.

The speaker for the day was Dr. Carl C. Fisher, Professor of Pediatrics, Hahnemann Medical College. Dr. Fisher's subject was "Adolescence — A Medically Neglected Field." The lecture was both interesting and informative, especially at the present time with problems of the adolescent in the forefront.

Following the short business meeting and the scientific session an excellent dinner was enjoyed.

GEORGE F. RISI, M.D.
Reporter

Gloucester

Dr. John J. Laurusonis presided at the regular meeting of the *Gloucester County Medical Society* at the Woodbury Country Club, December 16, 1954. A film on the management of hypertension of the closed-circuit television symposium (sponsored by the American College of Physicians and Wyeth Laboratories) was exhibited.

During the business meeting, the society voted to send letters of appreciation to the American College of Physicians and the Wyeth Laboratories who supplied the film, projector, and projectionist.

The following were elected to full membership: John W. Langley, M.D. of Gibbstown; and Harry B. Lockhead, M.D. of Woodbury.

After much discussion, it was decided to communicate with widows of physicians to see if they preferred flowers from the society at the funeral or a memorial gift to the deceased physician's favorite charity.

Dr. Patterson reporting for the legislative committee discussed the problem of "privileged communication" as applying to physicians. Dr. Patterson also mentioned labor union medical plans competing with our Medical-Surgical Plan, and suggested caution before signing with the union plans.

LOUIS K. COLLINS, M.D.
Reporter

Hudson

Hudson County Medical Society held its regular meeting on December 7, 1954, at the Jersey City Medical Center. Dr. Edward G. Waters presided.

An amendment to the Society's By-Laws was unanimously adopted. Under this amendment it becomes obligatory that a physican be present at the regular monthly meeting at which he is to be elected to active membership.

Dr. Greenberg, chairman of the Diabetes Committee, reported a successful Diabetes Detection Drive in Hudson County during the week of November 14.

Dr. Donnelly, legislative keyman for Hudson County, reported that all efforts are being made to defeat S. 282 and A. 265.

It was announced that Monsignor John L. McNulty, president of Seton Hall University, would be guest speaker at the Society's meeting on January 4, 1955. Members of the Hudson County Dental Society will also be invited to this meeting.

The scientific speaker was Dr. Adrian Lambert, Attending Surgeon at Bellevue Hospital in New York. The feature of Dr. Lambert's lecture was a sound film entitled "Radical Surgery for Advanced Lung Cancer." Discussants of the subject were: Dr. Barbarito, Dr. Bortone, Dr. Costello, Dr. Peckman, Dr. Perlberg, Jr., and Dr. Ross Simpson.

STEPHEN A. MICKEWICH, M.D.
Reporter

Middlesex

Dr. Malcolm Dunham presided at the regular monthly meeting of the *Middlesex County Medical Society* held at the Roosevelt Hospital, Metuchen, on December 15, 1954. Minutes of the November meeting were approved as read.

Dr. Haywood, Chairman of the committee, recommended the following applicants for membership: Dr. Marshall I. Hewitt, New Brunswick on transfer from the Wayne County Medical Society of Detroit, Michigan, and Drs. Charles Bergen, Spotswood, Charles de Groat, New Brunswick, Daniel Ross, Highland Park and Eugene J. Tyrrell, Perth Amboy, who were elected to regular membership from associate membership. Drs. Donald F. McDonnell, Stelton, Irwin Goldsmith, Parlin, S. H. Silverman and Howard Slobodien of Perth Amboy, were elected to a two year associate membership. The newly elected members were introduced to the Society by their sponsors.

Annual reports of all committees were received reviewing activities during 1954.

The Field Physician of Middlesex County (Dr. William H. Ainslie) reported that five maternal deaths had occurred. All were investigated. None were found to be preventable.

Dr. Kohut, Chairman of the Welfare Committee, reported the deaths of two members during the

year—Dr. L. C. Bassett, Dunellen, who at the time of his death was vice-president of the Society and Dr. Maurice Rona, New Brunswick. Tokens of condolences were sent to the members of their families in the name of the Society.

Dr. Raymond J. Gadek, Chairman of the Physicians-Pharmacists Liaison Committee reported that his committee would be set up to take care of the exchange of information between both societies, establishing better relations between the societies, cooperation in public health and public relations projects and settlement of grievances.

It was suggested that a joint bulletin be issued to members of both organizations, the expense being shared equally by the two Societies. Two issues of the "Joint Release" have already been published. A third is in press. This bulletin has won favorable comment from the State Pharmaceutical Society and from several County Societies seeking information about organizing similar projects.

Dr. Dunham read a letter from Dr. Elton W. Lance, President of The Medical Society of New Jersey requesting the attitude of the Middlesex County Medical Society on the establishment of a Cytologic Survey Laboratory sponsored by the City of New Brunswick. A motion was made by S. David Miller, that the Middlesex County Medical Society approve in principle the establishment of a Cytologic Laboratory in New Brunswick, but withhold approval of the present laboratory until it is under proper and continuous supervision of a pathologist. The motion was passed.

IVAN B. SMITH, M.D.
Reporter

Somerset

A regular meeting of the *Somerset County Medical Society* was held at the Somerset Hospital on December 9, 1954. The business meeting was opened by the Vice-President, Dr. John L. Spaldo. Thirty members and guests were present.

Minutes of the previous meeting were approved as read. Dr. Marcus Sanford read a letter from A. Bell, D.D.S., Vice-President of the Plainfield Dental Society, inviting our medical society to attend their meeting on February 9. It was suggested that any members who would like to attend communicate with Dr. Sanford.

Dr. Edgar Flint and Dr. Mason Pitman were approved for Emeritus Membership.

Dr. Robert A. Cosgrove, Attending Obstetrician at the Margaret Hague Maternity Hospital, was speaker of the evening. His topic was Obstetrical Problems and Complications with Particular Relation to Forceps Application. Following Dr. Cosgrove's talk there was a question and answer period.

C. S. McKINLEY, M.D.
Reporter

Union

The annual outing of the *Union County Medical Society* was held on Wednesday, October 13, 1954 at the Richmond County Country Club, Staten Island, New York.

Golf and fishing were among some of the activities enjoyed by the members. Luncheon was served at noon time.

The affair finished with a dinner.

The regular meeting of the Society was held at the White Laboratories, Kenilworth, November 10, 1954, with the president, Dr. Edward G. Bourns presiding.

Speaker of the evening was Judge Harry Medinits, who spoke on "The Doctor and the Compensation Court."

Following this address a business session was held and there was a discussion of the proposed criteria for consultants to the Medical-Surgical Plan. It was announced that the Woman's Auxiliary of the Union County Medical Society had contributed $100 toward the advertisements in the county newspapers regarding the referendum on the Medical-Dental School.

Six candidates were elected to membership in the society: Drs. Solomon J. Cohen, Westfield, James F. Dougherty, Jr., Summit, Irving R. Fox, Union, Milton H. Hollander, Rahway, Henry R. Krakauer, Bound Brook and John E. Morehead, Dunellen.

A collation was served at the end of the meeting.

MERTON L. GRISWOLD, JR., M.D.
Reporter

N. J. Neuropsychiatric Association

At its Annual Meeting, December 31, 1954, the *New Jersey Neuropsychiatric Association* elected the following officers for the calendar year 1955.

Dr. J. L. Evans, Jr., of Englewood became president and Dr. Evelyn Parker Ivey of Morristown was named president-elect. Your reporter was elected secretary while the bank books of the Association were entrusted to Dr. David McCreight of Marlboro who became treasurer. As trustees, the Association elected Dr. Robert Garber of Princeton, Dr. William Furst of East Orange, Dr. Leon Reznikoff of Weehawken, Dr. Luman Tenney of Princeton, Dr. Floyd Fortuin of Paterson and Dr. John Kelly of New Brunswick. The retiring president, Dr. Frank Pignatoro of Red Bank becomes a member of Council.

IRA ROSS, M.D.
Reporter

N. J. Society of Clinical Pathologists

The fourth annual Tumor Seminar sponsored by the New Jersey Society of Clinical Pathologists and the New Jersey State Department of Health, was held on December 11, 1954, at the Presbyterian Hospital of Newark. Eighty pathologists of New Jersey and guests from Pennsylvania and New York attended. Dr. Stewart and Dr. Foote, pathologists of the Memorial Center for Cancer of New York City, acted as moderators. Dr. T. K. Rathmell of Trenton is President of the New Jersey Pathologists and Dr. A. R. Casilli of Elizabeth is Chairman of the Program Committee. E. L. Shaffer, Ph.D., Director of Laboratories, represented the State Department of Health, which through its Bureau of Pathology prepared all the microscopic slides, color projections, and other arrangements pertaining to this successful meeting. These annual seminars are held for the purpose of discussing difficult diagnostic problems in the histopathology of malignant disease.

T. K. RATHMELL, M.D.
President

Woman's Auxiliary • • •

Woman's Division of New Jersey State Safety Council

A meeting of the Executive Board of the Woman's Division of New Jersey State Safety Council was held on November 5, 1954 at Bamberger's Department Store, Newark. Mrs. Doane presided as chairman. It was announced that stress is now put on safe storage of fire-arms. Many children are killed due to careless handling and storage of fire-arms during the "hunting" month of November. In December stress will be on the "Do it Yourself" program and the giving of *good* tools for Christmas to further home repairs.

It was suggested that demonstrations be given in fireproofing household articles, such as curtains, pot holders, rugs about the fireplace, et cetera. A simple solution to be used in spraying or dipping such articles is 7 ounces of powdered borax, 3 ounces of boric acid, and 2 quarts of hot water.

The committee was asked to have members or substitutes for people to represent our counties in local meetings. Mrs. Doane finds there are only ten counties that have active safety groups.

MRS. JOHN J. REILLEY, Jr.

Auxiliary Report • • •

Essex

Mrs. George C. Parell, chairman of the Annual Chrysanthemum Ball sponsored by the *Woman's Auxiliary to the Essex County Medical Society,* and her committee deserve a big vote of thanks for their superb handling of this gigantic undertaking. The gala dinner-dance was held on November 20, 1954 at the Military Park Hotel in Newark. Proceeds will be used to augment the Nurse Scholarship Fund and for other philanthropic projects. Dr. Henry H. Kessler was a most delightful and entertaining Master of Ceremonies. Invited guests were: Dr. and Mrs. Kessler, Dr. and Mrs. Paul E. Rauschenbach, Dr. and Mrs. Frank S. Forte, Dr. and Mrs. Asher Yaguda and Dr. and Mrs. Jerome G. Kaufman.

On November 22, Mrs. Philip R. D'Ambola presided at a regular meeting of the Auxiliary at 369 Park Avenue, Orange. Following an Executive Board Meeting, a refreshing "Coffee Break" was provided by our Hospitality chairman, Mrs. Arthur Ruccia. Program chairman, Mrs. Harry E. Di Giacomo, introduced a representative of J. J. Hockenjos Company, Irvington, who gave a premier showing of the technicolor sound film, "Background of Modern Living." An interior decorating expert gave an instructive lecture on home decorating and then followed it with a question and answer period.

This month we extend a hearty welcome to four new Auxiliary members. They are — Mrs. Frank L. Rosen, Mrs. V. Francis Pakonis, Mrs. William F. Thornley and Mrs. Rush C. Bauman.

November 17, the Essex County Tuberculosis League opened the 1954 Christmas Seal Campaign with a meeting at L. Bamberger and Company, Newark. The next day, our president, Mrs. Philip R. D'Ambola, representing the Auxiliary, participated in a radio program sponsored by the League over Station WAAT. Mrs. Anthony Giannotto, Booths chairman, did likewise on television on December 7.

Mrs. Frank Galioto, Public Relations Day chairman, and Mrs. Philip R. D'Ambola met on December 9 with our Auxiliary advisor, Dr. Jerome Kaufman, to make tentative plans for the School Health program to be held at 369 Park Avenue, Orange, on March 16, 1955.

A.M.E.F. chairman, Mrs. Thomas Santoro, held a meeting with her committee at her home on December 3 to formulate plans for a Luncheon-Fashion Show to be held on February 11 at 369 Park Avenue, Orange. This will benefit the A.M.E.F. fund.

MRS. THOMAS A. MESSINA,
Chairman, Press and Publicity

MRS. JOSEPH DI NORCIA, Co-chairman

Book Reviews • • •

Many of the reviews in this section are prepared in cooperation with the Academy of Medicine of New Jersey.

Smoking and Cancer. By Alton Ochsner, M.D. New York 1954. Julian Messner, Inc. Pp. 86. ($2.00)

Ulysses Grant was the cigar-smokingest hero in this country's Hall of Fame. He died in agony of a carcinoma of the larynx. The last King of England used his royal veto to disregard his doctor's advice to give up cigarets. He died of a carcinoma of the lung. Ochsner speculates on the strange mechanism which causes so many people (including some doctors) to shut their eyes to the plain evidence that smoking is intimately associated with carcinoma of the respiratory tract. Practically no non-smoker ever develops a lung carcinoma (actually about half of one per cent of such cancers are in non-smokers). Common sense would indicate that there *is* a close relationship. Ochsner tears into the cigaret companies for misleading the public with false claims about the healthiness of their products, and somewhat blurs his own case by overstating it.

His style is theatrical. (Example: "Tobacco is a lethal weapon. Time pulls the trigger.") His preaching reminds one of a Victorian padre denouncing masturbation. (Example: "If you are a heavy smoker, you may not die of carcinoma. You may go blind from amblyopia. You will certainly lose most of your sense of taste, and become progressively more nervous.") His advice approaches sermonizing. (Example: "If you give up smoking a luke-warm bath before retiring may relieve tension.") He denounces filters as a hoax and suggests that king-sized cigarets are associated with king-sized cancers. He gives small comfort to the pipe or cigar smoker, pointing out that they simply massage carcinogens into the tongue or lips. He stresses the effect of smoking on peptic ulcer, peripheral vessels and coronary function. And he really hits below the belt when he asserts that smoking lessens sexual potency.

The case against smoking seems so clear that a book like this should scarcely be necessary. Perhaps, Ochsner defeats himself by his extravagance and over-dramatization. But it is a serious subject. Up to 1912 only 374 cases of lung cancer had been reported in all of America's medical literature. In 1954, there were 25,000 deaths from it. He who runs may read.

VICTOR HUBERMAN, M.D.

Practical Fluid Therapy in Pediatrics. By Fontaine S. Hill, M.D. Pp. 275. Philadelphia, Saunders, 1954. ($6.00)

The need for a working knowledge of fluid and electrolyte balance is recognized by everyone dealing with pediatric patients. Where to obtain this knowledge in a concise, consistent form is a problem. This book is one answer. The author has accomplished his purpose of presenting the basic physiologic and biochemical principles necessary for an understanding of the derangements which may occur in the sick child, and in showing how to apply this understanding in a rational approach to therapy.

One part of the book is concerned with basic concepts of the role that water and electrolytes play in the body's economy and the regulatory mechanisms utilized in maintaining the constancy of the "internal milieu." A minimal recollection of

biochemistry will enable the reader to digest this section painlessly. The remainder of this segment is devoted to a discourse, in logical sequence, of abnormalities of electrolyte patterns.

The second portion of the book begins with a discussion of the repair solutions available for correction of fluid and electrolyte imbalances. The remainder of this section concerns itself with the specific conditions likely to be encountered by the clinician: case reports, the pathophysiology, indicated laboratory examinations and therapy. The reviewer was particularly pleased to find emphasis placed on Alexis F. Hartmann's approach to treatment of diarrheal acidosis and diabetic coma. Even the most rabid "anti-alkali" proponent should be placated by Dr. Hill's discussion of the Darrow and Butler technics for handling these disorders.

The last part of the book describes the technical skill necessary for obtaining blood samples from infants and children and the methods of administering the indicated fluids.

Dr. Hill is repetitious in describing indications for certain solutions, mode of administration, and calculation of dosage. This is an asset in a book of this sort where thinking along these lines may be foreign to many of the readers. By the time one has completed his study of the text he should be as familiar with how to determine what fluids are needed for a specific case, and in what amount, as he is facile with calculating the dosages of the sulfonamides and antibiotics.

It behooves everyone who deals with children—especially surgeons, general practitioners and pediatricians—to be familiar with the contents of this book.

JACK J. SCHWARTZ, M.D.

Diseases of the Skin. By George Clinton Andrews, M.D. 4th ed. Pp. 877. Philadelphia, Saunders, 1954. ($13.00)

In this latest edition Dr. Andrews has brought his clinical material up to date and in line with current dermatologic thought. This is exemplified by his remarks on juvenile melanoma, the brief but adequate paragraphs on kerato-canthoma and the section on cat scratch disease. Therapy has been revised and is modern. Our newest agents are presented. It is gratifying to find a text that is not out of date on treatment at the time of printing.

The sections on radiotherapy are particularly good. Older agents are thoroughly and carefully treated and the technic of application of x-ray and radium is handled with detail. The uses of Grenz rays, the new and experimental cathode ray, Thorium X and radioactive isotopes such as Strontium 90 are discussed. It is interesting to note Dr. Andrews' conservative attitude towards x-ray therapy for acne vulgaris.

The section on the treatment of syphilis seems too brief. The reviewer believes some discussion of the older therapeutic agents is indicated even if only from a historical point of view.

The reviewer believes that the recommended treatment of hemangioma simplex with solid dry ice is too vigorous. The inclusion of tinea and moniliasis among the common causes of pruritis of the genitalia and the anus is only a hangover from early editions.

On the whole, however, this text can be warmly recommended to students and general practitioners as well as to specialists for its directness, up-to-dateness and convenience. It is a good standard text which has been carefully and thoroughly revised.

SAMUEL D. KAPLAN, M.D.

Hugh Roy Cullen: Story of American Opportunity. By Edwin Kilman and Theon Wright. New York 1955. Prentice-Hall. Pp. 369. ($4.00)

The rugged individualist is a vanishing breed. but Hugh Roy Cullen—one of the world's wealthiest and most individualistic men—is still going strong at 73. Slightly stooped, but stalwart and broad-shouldered, he emerges from this biography as a fabulous Texas oil titan as well as one of the greatest philanthropists of our time.

It's an absorbing story: the poor boy who became rich, the man who never reached the 6th grade but who made college education possible for a million others; the potent political force who picks persons not parties, and the man who seems to be working harder to give away his money than he did to earn it. Four Texas hospitals (of two races and four different denominations) have been beneficiaries of Cullen's philanthropy.

HERBERT BOEHM, M.D.

Parkinsonism and Its Treatment. Edited by Lewis J. Doshay, M.D. Pp. 152. New York, Lippincott. 1954. ($3.00)

This modest little volume is an anthology by a group of well selected contributors who maintain an authoritative and informative approach. Denny-Brown, for example, who contributes the chapter on etiology, is Professor of Neurology at Harvard Medical School. Abner Wolf, Professor of Neuropathology at Columbia University, wrote the chapter on pathology. William Benham Snow, Professor of Physical Medicine at Columbia University, did the section on physical therapy. Samuel Brock, Professor of Neurology at New York University,

contributed the chapter on psychotherapy. With contributors of this magnitude plus others and under the capable editing and correlating of Lewis J. Doshay the volume, despite its modest size, takes on considerable value. There are more illustrations than the known and verified pathology of the disease would justify but no other criticisms of the volume can be raised. The chapter on drug therapy by Doctors Doshay and Zier is particularly well formulated. Much the same can be said for the chapter on physical therapy and the one on surgical therapy by Dr. Edward B. Schlesinger.

This volume makes no pretense of being a source book of all available information on the subject. It is a compact little work which brings together in its pages all of the basic information which the student and general practitioner would ever need to know about the present status of Parkinsonism. The selection of contributors places it in an authoritative status. The book is highly recommended to all those dealing with this subject.

LEWIS H. LOESER, M.D.

Fundamentals of Otolaryngology. By Lawrence R. Boies, M.D. Second Edition. Pp. 487. Philadelphia, Saunders, 1954. ($7.00)

The second edition of Boies' *Fundamentals of Otolaryngology* succeeds, brings to date, and improves upon a concise and comprehensive review of diseases of the upper respiratory tract. This book has been adopted for undergraduate teaching in many medical schools. It is brief though thorough, logical and easy to read.

Particular note is made of the changes in otolaryngology by reason of the control of infection following the use of antibiotics and chemotherapy. However, sight is not lost of the increased need for diagnostic acumen in resistant mastoid and sinus infection and their serious complications. Also, more emphasis is being rightly placed upon the increased activity in related allergy, rhinologic and maxillofacial surgery, otology and audiology.

The problems of vertigo and tinnitus are brought to date with apt descriptions or recent theories, clinical findings and therapeutic considerations.

Lymphoid tissue of the nasopharynx gains its rightful position of prominence with proper mention of direct visualization in adenoid surgery.

There are few omissions of importance. In a book of this type it would be of benefit to include allergy of the ear, and the use of the nasopharyngoscope as a diagnostic tool.

Illustrations and diagrams have been added with increased clarity. The lists of references at the end of each chapter have been brought to date and include the most prominent and recent articles in each field.

Fundamentals of Otolaryngology occupies a definite and prominent position in the basic literature of disease of the ear, nose and throat.

ARTHUR DINTENFASS, M.D.

Handbook of Medical Treatment. Edited by Milton Chatton, M.D., Sheldon Margen, M.D. and Henry Brainerd, M.D. Los Altos California 1955 Lange Medical Publications. Pp. 570. ($3.00)

Probably the only serious criticism that can be made of this fat *vade mecum* is that it is paperbound, and with constant use, the binding will break and the cover fall off. In systematic fashion, the text covers the major illnesses to which we are heir, and crisply, compactly and simply lists the recommended treatment. To this, the editors have added numerous extras: disease code numbers, bed positions, a ruler, precautions for contagion, temperature and dosage conversions, notes on fluid and electrolytic balance, suggestions on acid-base regulation, evaluation of suicide risk, management of shock, height and weight tables, normal blood and body fluid values, drug contra-indications, rehabilitation of the hemiplegic and a score of other items. All together, an extraordinary three dollars worth!

ULYSSES FRANK, M.D.

Atlas of Orthopedic Traction Procedures. By Carlo Scuderi, M.D. Pp. 230. St. Louis, Mosby, 1954. ($12.50)

The author has made excellent use of good illustration in presenting a uniform pattern of procedure in setting up each of the many forms of orthopedic traction. His photographs and line drawings together with their attendant legends serve as an excellent visual educational backdrop to highlight the explanatory text. These illustrations display not only the equipment *per se* but also the appearance of the equipment when properly applied to a patient lying in a hospital bed.

In dealing with each form of orthopedic traction, Dr. Scuderi takes up first the indications and the items required for that type of traction. The technic of the procedure is then covered in detail by the illustrations and a generous commentary.

The author recognizes that modern equipment is not a useless expenditure, that the equipment room must be close to the fracture room and be made readily available by the proper distribution of keys. He points out that overhead frames should be already set up on a sufficient number of beds.

Both teacher and student will find their assignments made easier by the use of this book.

DANIEL E. KAVANAUGH, M.D.

TUBERCULOSIS *Abstracts*

Supplied by New Jersey Trudeau Society

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Vol. XXVIII February, 1955 No. 2

Incidence of Tuberculosis Among Homeless Men

By Herbert W. Jones Jr., M.D., Jean Roberts, and John Brantner, Journal of the American Medical Association, July 31, 1954.

This study, an 11 months' intensive case-finding survey, is based on the client population of the Salvation Army Men's Social Service Center in Minneapolis. The center provides a rehabilitation program for homeless men. The majority of these men come on self-referral from "Skid Row," although, at any given time, about 10 per cent of the clients have been referred for rehabilitation as physically handicapped; 10 per cent as parolees and probationers, and about 10 per cent as provisional dischargees from the state hospital system. About 70 per cent of the client population regards the abusive use of alcohol as its major problem.

For five years preceding the start of this study, the Center depended on the periodic visits of the Christmas Seal Mobile X-ray Unit of the Hennepin County Tuberculosis Association to check the health status in regard to tuberculosis. During this period, no noticeable difference in incidence between the population here and the general population in Minneapolis was noted. However, it was felt that, since a third of the client population stayed less than one month, a routine weekly program of taking chest roentgenograms would give more complete coverage of the population. This was instituted in October, 1952, through the cooperation of the Minneapolis Public Health Division and the Hennepin County Tuberculosis Association. The results that follow are based on a survey of 405 consecutive chest roentgenograms taken routinely from October, 1952, through August, 1953. During that period all men who stayed at the Center at least one week were examined by means of a chest roentgenogram. Of the 405 who were screened, five per cent were under 30 years of age; 17 per cent between 31 and 40 years old; 33 per cent between 41 and 50; 35 per cent between 51 and 60, and 10 per cent 61 or older. The transient nature of the group is apparent from the fact that 30 per cent were residents of the city of Minneapolis; 20 per cent were residents of the state of Minnesota, and 50 per cent were considered "federal transients," since they had no established residence in any state. The results of this survey are shown in the table.

Results of Surveys Among Selected Population Groups in Minneapolis

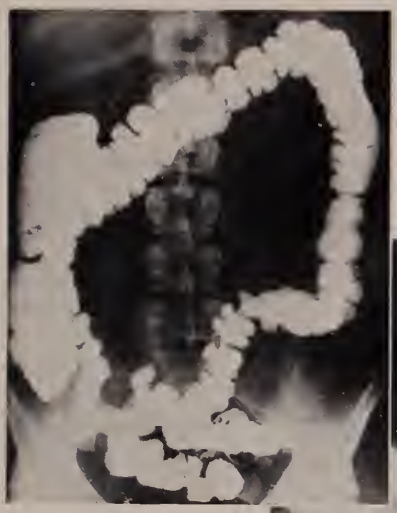
Groups	Number Screened	New Cases of Tuberculosis Found		New Cases per Thousand Persons Screened	
		Total	Active	Total	Active
Men's Social Service Center, October 1952, to August, 1953	405	14	9	34.6	22.2
Hennepin County TB Association Mobile Unit, 1952	53,995	149	20	2.8	0.4
Minneapolis industries	23,081	53	3	2.3	0.1
Institutions	6,655	52	6	7.8	0.9
School students and personnel	14,449	7	3	0.5	0.2
Other general groups	9,810	37	8	3.7	0.8
Minneapolis workhouse survey, 1952	2,238	18	4	8.0	1.8

In considering these results one should note that, in the portion of the population that was surveyed, the rate of active new cases per 1,000 is 22.2, compared with the similar rate for the Hennepin

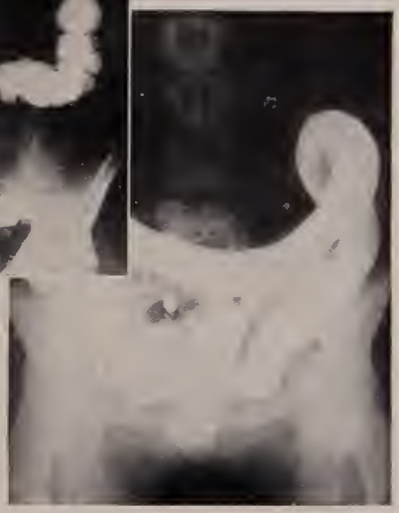
County Tuberculosis Association Mobile Unit survey of the general population of 0.4 per 1,000 in 1952. The rate in the population group surveyed is 55½ times as great as the general rate in Minneapolis for that year. The difference in the incidence of tuberculosis between these two groups is highly significant.

It is recognized that the rate of new cases found is related to the intensity of the search for them. However, this factor probably does not account for most of the difference in rates, especially since the rate of new active cases in the sample of homeless men is 13.4 times as great as the rate found in the Minneapolis Men's Workhouse population, the most nearly comparable survey both as to population composition and to intensity of search. This high rate of incidence of tuberculosis occurs in a transient, very mobile population group. It occurs in a population group that in general lives under conditions that are likely to foster infection of others in the same group. The men in this group sleep generally in dormitories, whether in the cheap hotels or in the various rehabilitation centers throughout the country. They are generally in fatigued physical condition, and their standards of cleanliness and personal hygiene tend, through economic necessity, to be low.

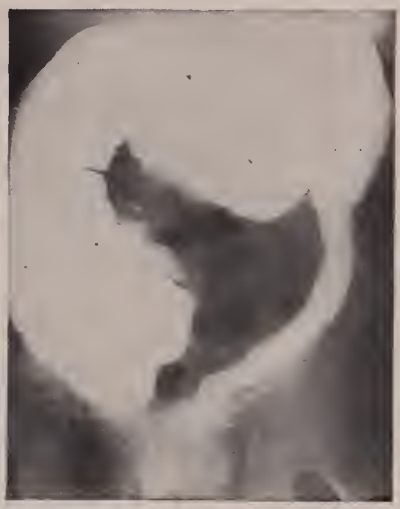
This rate occurs in a population group that is very likely to take temporary jobs as food handlers —cooks, cooks' helpers, dishwashers, etc.—situations in which the possibility of transmission of the disease to the general population is a factor. This rate occurs in a population group that is not limited to Minneapolis and that by its very nature can be presumed to exist in every large urban center in the United States. There is no reason to suppose that the rate of incidence found in Minneapolis is very much different from the rate that would be found by similar surveys in other cities. Indeed, it is very logical to assume that, in a survey that covered not only the younger groups such as those applying for admission to the rehabilitation centers but the entire "Skid Row" population, including the older, more permanent residents, the rate would be higher. This survey reveals an important aspect of the public health problem of tuberculosis. The homeless men quite probably constitute a primary source of reinfection for tuberculosis in the United States. Any public health program that has as its aim the eradication of tuberculosis in our population should take particular account of this segment of the population. The study points to the need for intensified case-finding surveys of the populations of our "Skid Rows" and of our rehabilitation centers.



Normal Colon



Ulcerative Colitis



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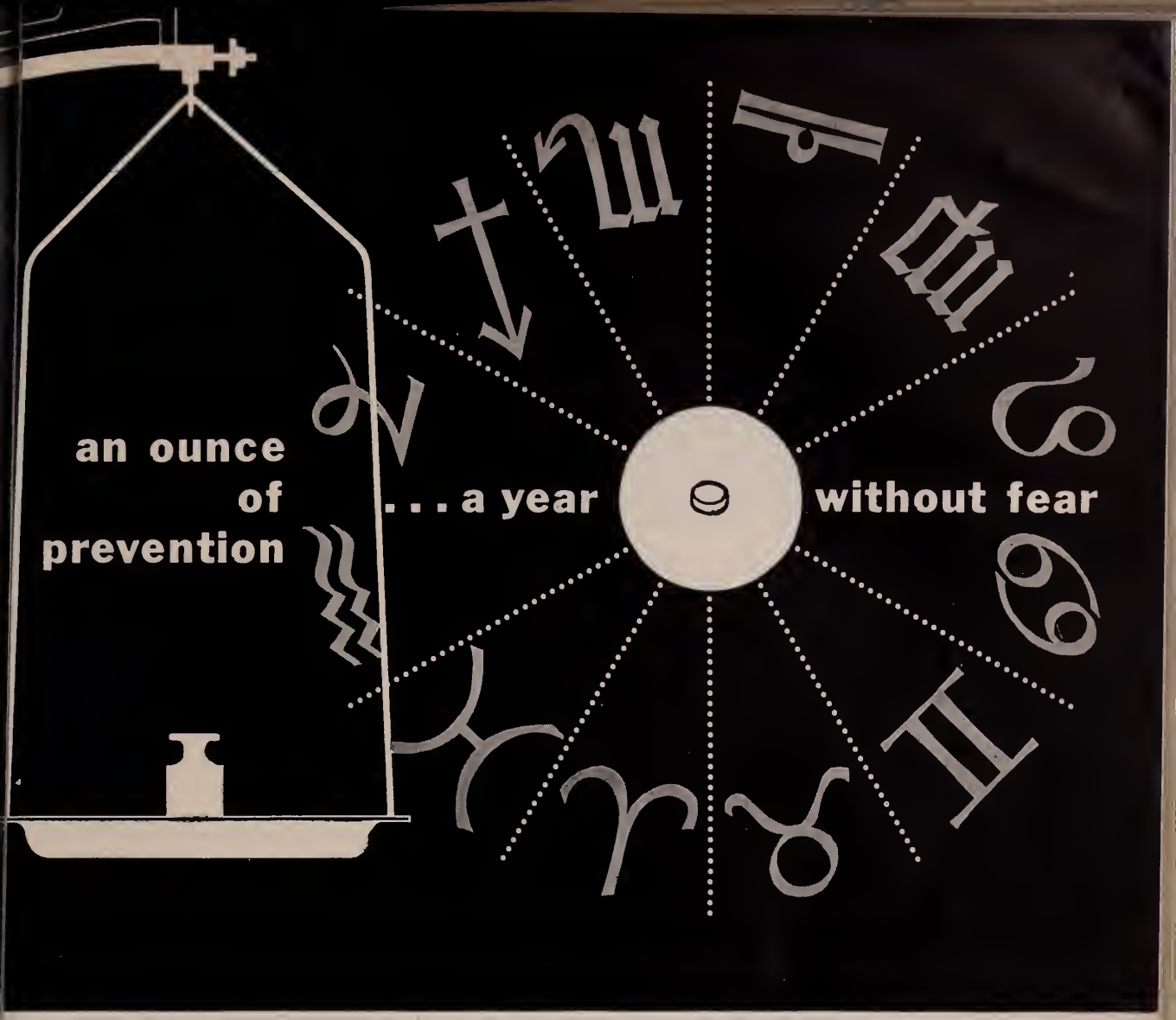

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1. Russek, H. I.; Urbach, K. F.; Doerner, A. A., and Zohman, B. L.: J.A.M.A. *153*:207 (Sept. 19) 1953. 2. Winsor, T., and Humphreys, P.: Angiology *3*:1 (Feb.) 1952. 3. Plotz, M.: New York State J. Med. *52*:2012 (Aug. 15) 1952.

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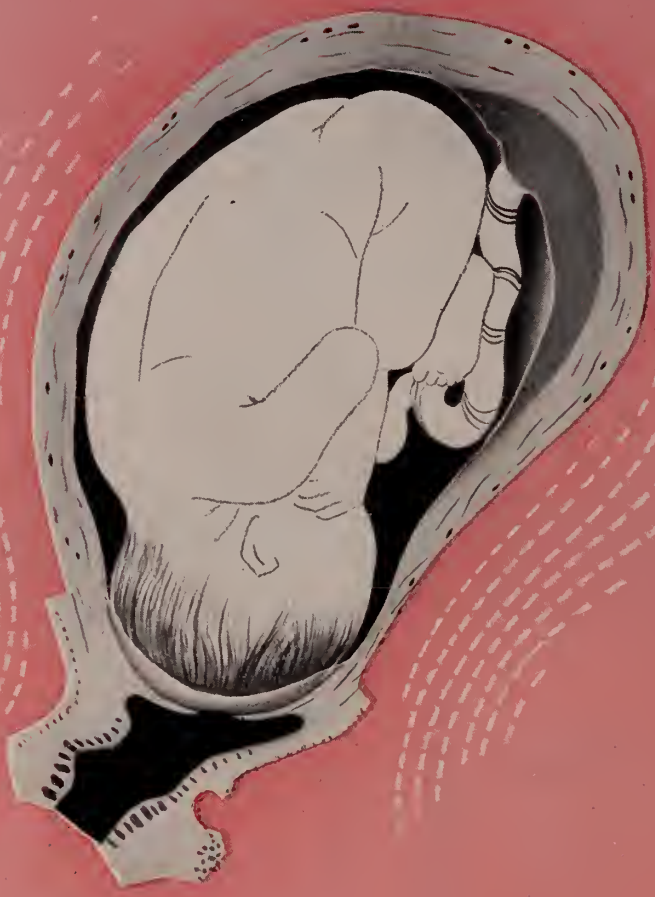

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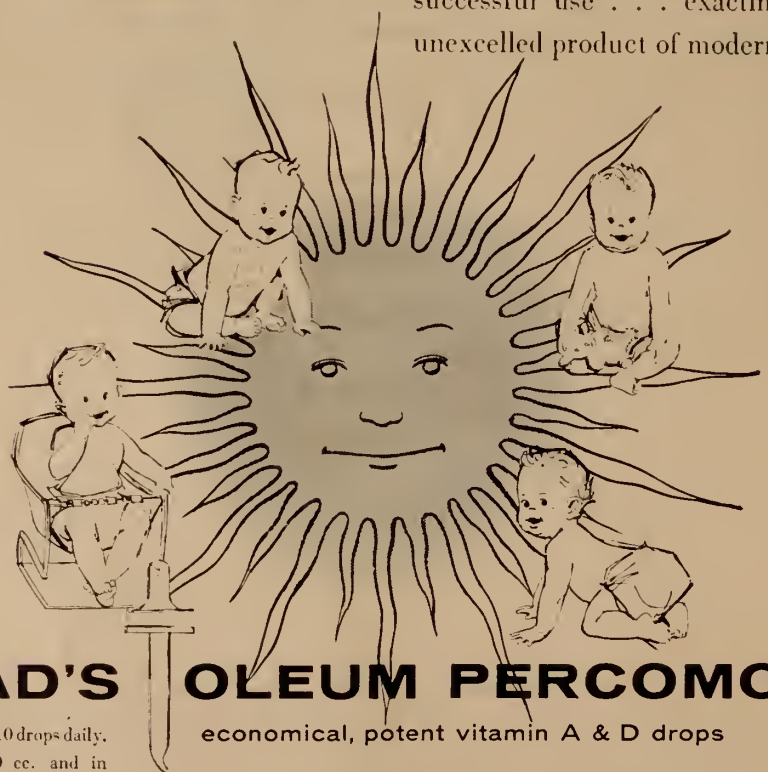

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THE JOURNAL

OF

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$100.00	$ 5,000	$ 29.50	$ 34.00	$ 43.00
150.00	7,500	43.60	50.35	63.85
200.00	10,000	57.70	66.70	84.70
300.00	15,000	85.90	99.40	126.40
400.00	20,000	114.10	132.10	168.10
500.00	20,000	141.30	163.80	208.80
600.00	20,000	168.50	195.50	249.50

* Premiums may be paid half-yearly or quarterly, pro-rata.

* All rates above INCLUDE $1000 Accidental Death Benefit. Additional Accidental Death Benefit up to $4000 (making a total of $5000) may be procured for an additional annual premium of $1.30 per $1000.
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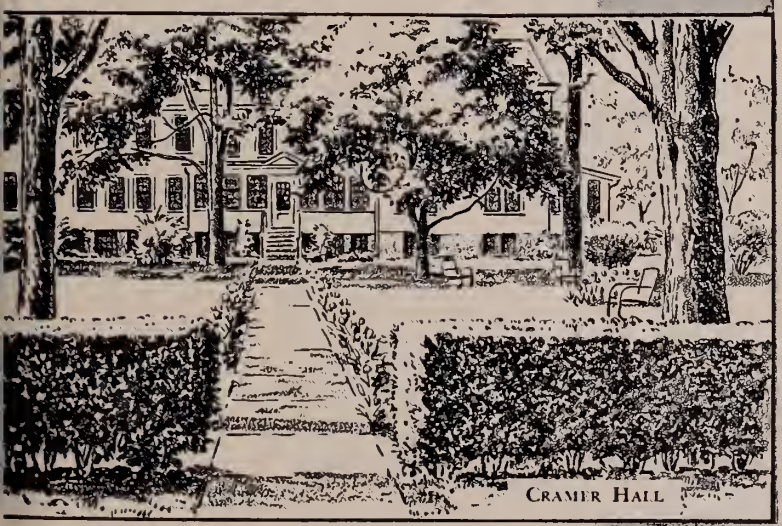
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- A modern tested diaper supply service for our customer's exclusive use.

Safe! Individual! Dependable!

ELECTRON PHOTOMICROGRAPH

Escherichia coli 36,000 X

Escherichia coli ("colon bacillus") is a Gram-negative organism
commonly involved in
urinary tract infections and peritonitis,
and is an important etiologic agent of otitis media, mastoiditis, enteritis,
and septicemia in infants.

It is another of the more than 30 organisms susceptible to

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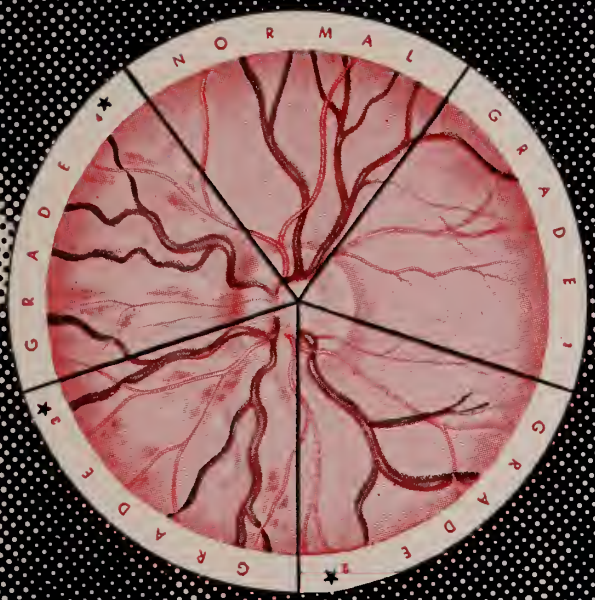

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Streptococcus pyogenes is a Gram-positive organism commonly involved in a great variety of pathologic conditions, including

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bronchopulmonary disease • pyoderma • empyema • septicemia • meningitis
mastoiditis • vaginitis • rheumatic fever • acute glomerulonephritis

It is another of the more than 30 organisms susceptible to

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For many years clinicians and surgeons have recognized the therapeutic value of the high protein dietary.

In more than normal amounts, protein is essential in the treatment of many diseases characterized by hypoproteinemia[1]—nephrosis,[2] sprue, pellagra, chronic colitis, certain liver afflictions,[3] anorexia of diverse etiologies. High protein intake helps to stabilize tissue protein in diseases in which protein catabolism is increased, such as hyperthyroidism and protracted high fever. Dietaries high in protein promote wound healing in the surgical patient and speed convalescence.[4] Sufficient protein ingestion constitutes a protective measure in the geriatric patient.[5] Large amounts of protein are required to satisfy the growth and other metabolic needs of the pediatric patient.

Meat provides large quantities of protein highly effective in the body economy—tissue growth and maintenance, formation of antibodies, enzymes, and protein hormones, and regulation of fluid balance. It also supplies valuable amounts of B vitamins and essential minerals including iron, phosphorus, and potassium. Appeal to the palate, easy digestibility, and its nutrient contribution make meat an important component of therapeutic diets.

---

1. Taggart, H. A.: Protein Metabolism in Relation to Nutritional Aspects of Medical Diseases, Pennsylvania M.J. *54*:339 (1951).
2. Marquardt, G. H.; Cummins, G. M., and Fisher, C. I.: Blood Protein Replenishment in Treatment of Nephritic Edema, Quart. Bull. Northwestern Univ. M. School *26*:140 (1952).
3. Kark, R. M.: Low Sodium and High Protein Diets in Laennec's Cirrhosis, M. Clin. North America *35*:73 (1951).
4. Kekwick, A.: Protein Deficiency in Surgical Patients, Ann. Roy. Coll. Surgeons England *7*:390 (1950).
5. Stieglitz, E. J.: Nutrition Problems of Geriatric Medicine, Report of Council on Foods and Nutrition, J.A.M.A. *142*:1070 (Apr. 8) 1950.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

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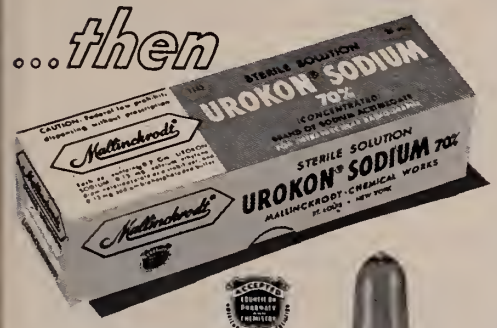

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—for INTRAVENOUS UROGRAPHY (in difficult cases), ANGIOCARDIOGRAPHY, CHOLANGIOGRAPHY, TRANSLUMBAR ARTERIOGRAPHY, NEPHROGRAPHY and (in dilution) for RETROGRADE PYELOGRAPHY — was developed to extend the use of UROKON to special diagnostic procedures. It is recommended for intravenous urography *in difficult cases,* including obese patients, children under four, and the occasional "average" patient who does not afford adequate shadows with less concentrated media. It gives diagnostic films of *superior contrast* and the incidence of side reactions is moderate[3,4].

[1]Nesbit, R. M. and Lapides, J.: J. Urol. *63:* 1109 (1950).
[2]Richardson, J. F. and Rose, D. K.: J. Urol. *63:* 1113 (1950).
[3]Nesbit, R. M. and Nesbitt, T. E.: U. Mich. Med. Bull. *18:* 225 (1952).
[4]Zinc, O. C.: (Private report dated May 12, 1952).

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Sterile Solution 50% *(STANDARD)*

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What do Viceroys do for you that no other filter tip can do?

These filter traps, doctor, are composed of a pure white non-mineral cellulose acetate. They provide maximum filtering efficiency without affecting the flow of the smoke.

And, in addition, they enhance the flavor of Viceroy's quality tobaccos to such a degree that smokers report they taste even better than cigarettes without filters.

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will your cardiac patients be able to continue the diuretic you prescribe

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uninterrupted therapy *is the key factor in diuretic control of congestive failure. You can prescribe* NEOHYDRIN *every day, seven days a week, as needed.*

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acts only in kidney...

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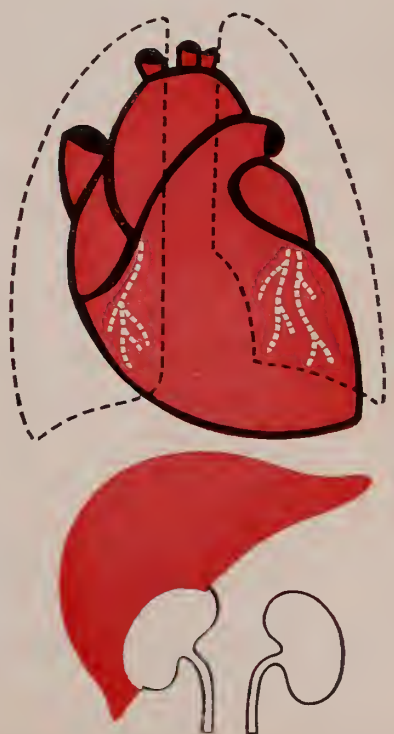

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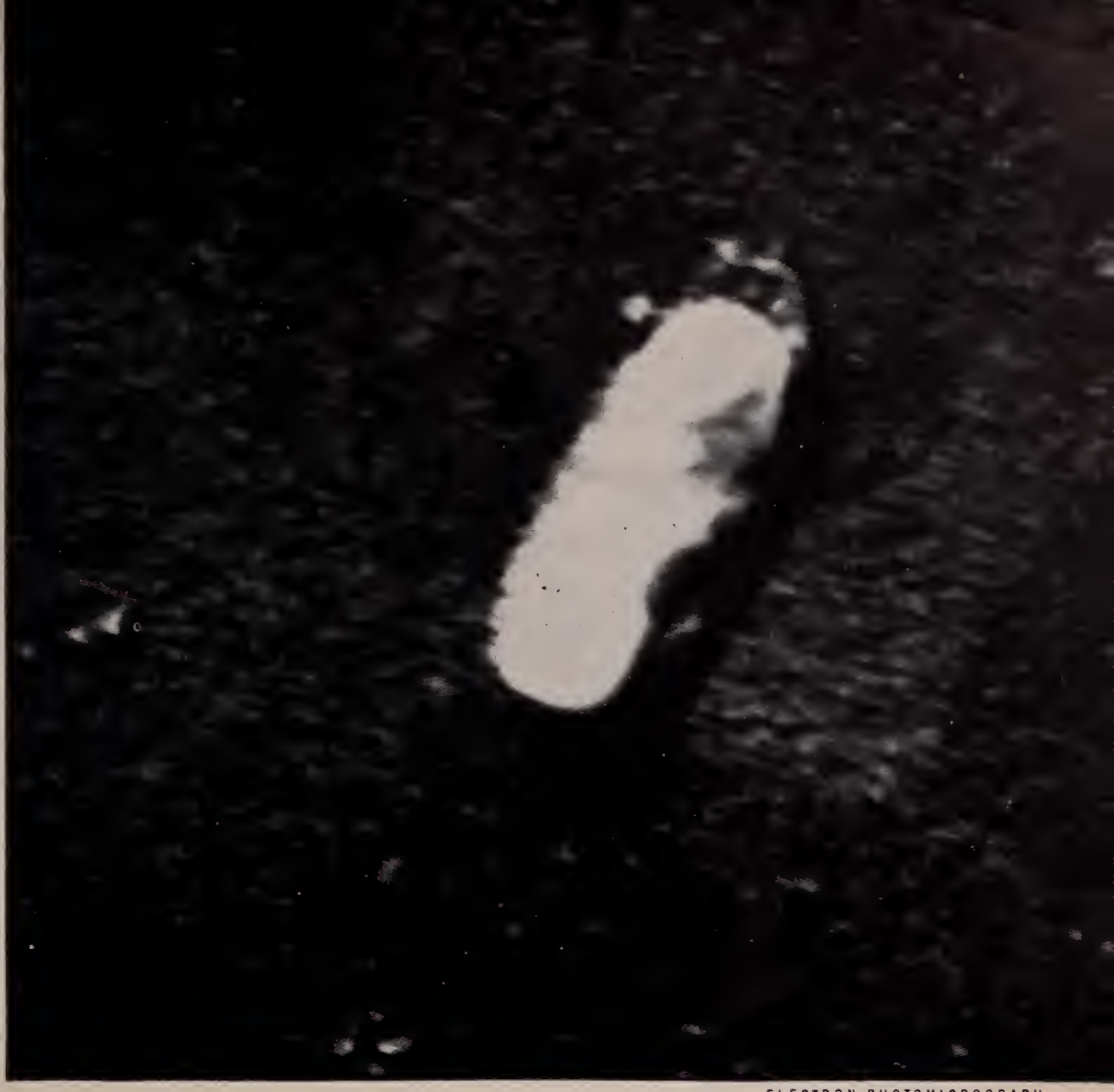

ELECTRON PHOTOMICROGRAPH

Hemophilus influenzae 64,000 X

Hemophilus influenzae ("influenza bacillus") is a Gram-negative organism which grows only in the presence of hemoglobin. Contrary to its name, it is not the causative agent in influenza, but rather is commonly involved in

meningitis • chronic bronchitis • bronchiolitis
tracheobronchitis • supraglottic laryngitis • bronchopneumonia

It is another of the more than 30 organisms susceptible to

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ZENITH'S FINEST QUALITY
IN THE TINY, NEW
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"75-X" HEARING AID
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By the Makers of World-Famous Zenith TV and Radio Sets

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A COMPLETE LINE OF HEARING AIDS

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You can refer your hard-of-hearing patients with confidence to any of the franchised Zenith Hearing Aid dealers listed on the opposite page:

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Cliffside Hearing Center, 659 Anderson Avenue

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Dover Jewelers, Inc., 19 E. Blackwell Street

EAST ORANGE
Anspach Bros., 533 Main Street

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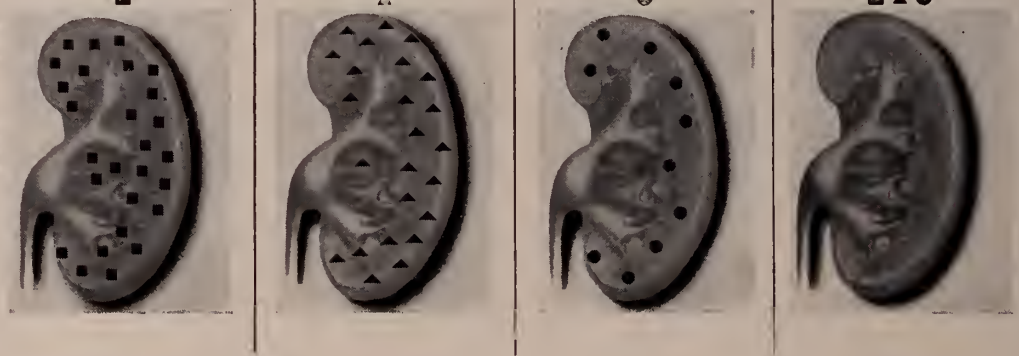
Low Renal Toxicity



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Appetizing raspberry flavor • Pint bottles

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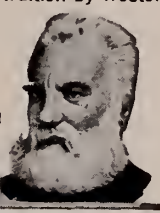

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1. Winsor, T., and Humphreys, P.: Angiology 3:1 (Feb.) 1952. 2. Plotz, M.: New York State J. Med. 52:2012 (Aug. 15) 1952. 3. Dailheu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.

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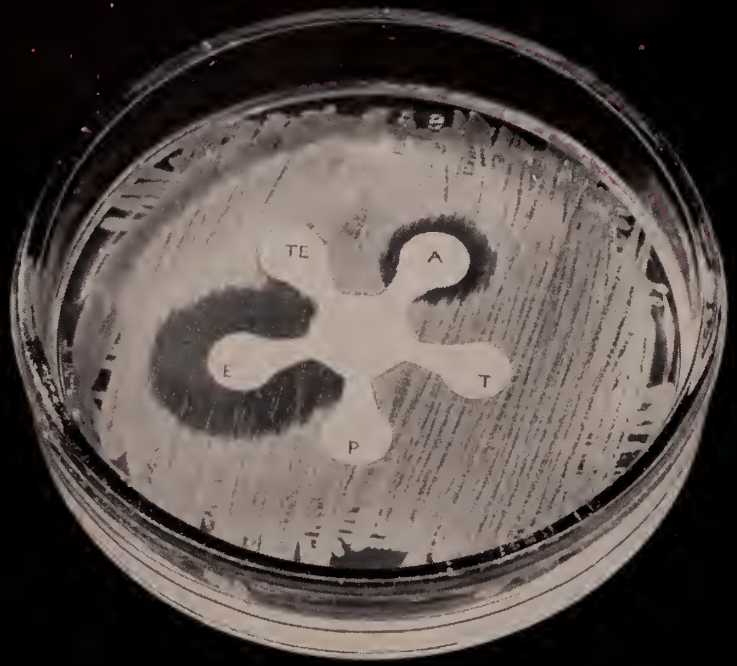

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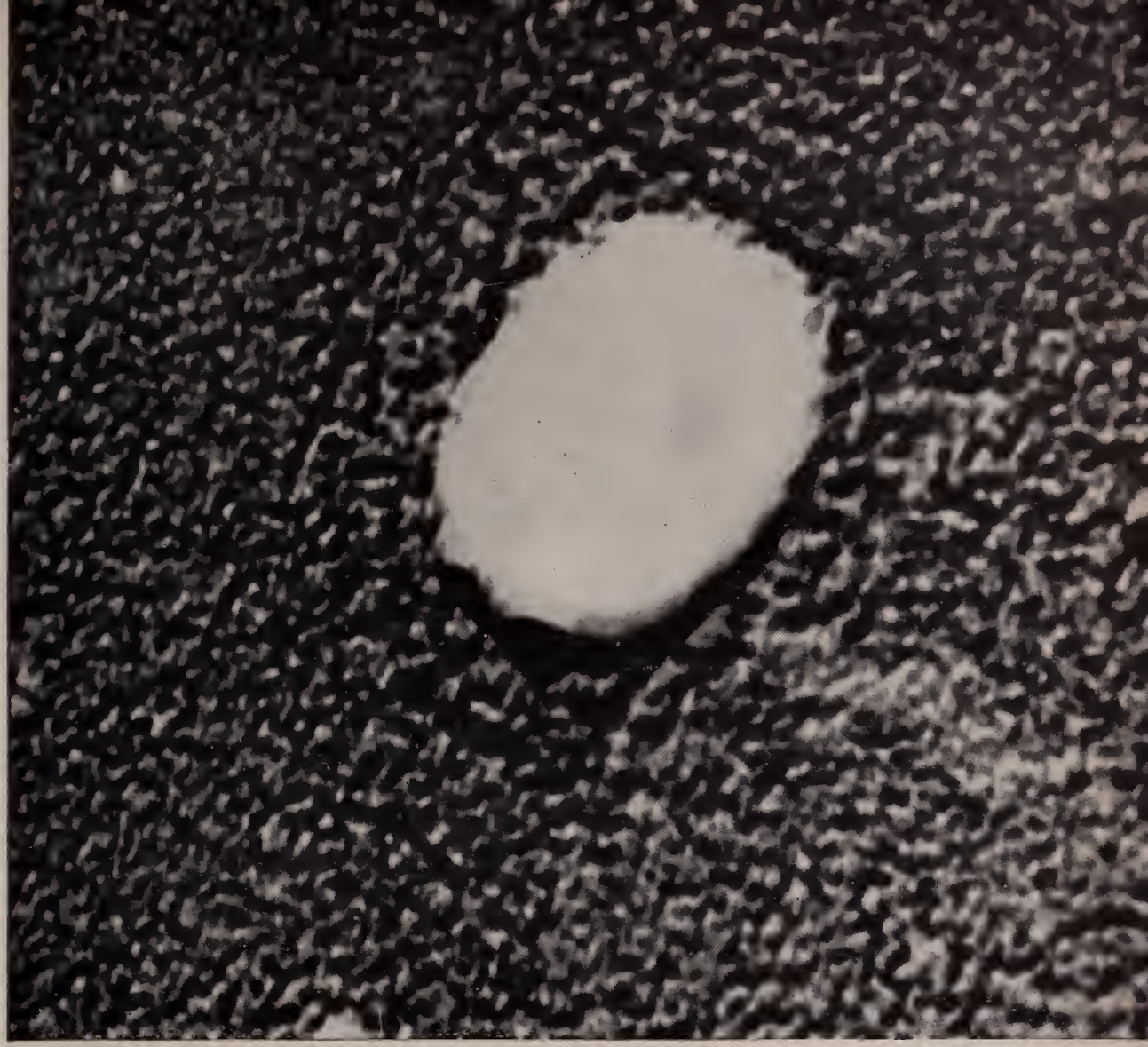

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THE JOURNAL
OF
THE MEDICAL SOCIETY OF NEW JERSEY

Editorials • • •

Is the Medical Society Representative?

It is sometimes whispered in the cloak rooms of hospitals and in lobbies of medical meetings, that the medical society is not truly representative of the doctors of the community. The allegation takes many forms. When a society—whether the A.M.A., or a state society, a specialty group, a hospital staff or a county medical unit—issues a resolution, there are those who say that it does not speak for the profession generally. It is said that a few leaders make all the decisions and force the rank and file to accept them under threat of some dark and mystic penalty. Or that a cabal representing one hospital, one geographic area, or one school of thought, has somehow seized the society's machinery.

It is certainly true that a member can effectively disfranchise himself by never going to meetings, by tossing all mail ballots into the waste basket, and by failing to perform committee service when asked. And if 60 per cent of the members evade all society contacts, then perforce, the remaining minority must make decisions and take actions. However, under those circumstances, it seems scarcely fair for the coat-holder to tell the fighter how to fight.

There is indeed, a magic pass-word to medical society participation. No, it is not a Greek letter fraternity phrase, nor is it a slogan reflecting the old school tie. It is not a secret word known only to the initiate. It is a simple phrase of four English words, uttered with sincerity to one of the officers of the society. The pass-word is: "How may I help?"

Almost any member who drops a hint that he is willing to serve on a committee, who attends meetings regularly, who stands on his own two feet and says so when he disagrees with a proposal, almost any such member, will be given a chance to participate. Maybe, in fact, one medical association or another does not sensitively reflect the opinions of the general membership. It could be. But whose fault is *that*? If the "unrepresented" member never

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voiced his opinion, never went to a business meeting, never offered to serve on a committee, who is to blame for his failure to make an impression?

You'll be getting a notice of a county medical society meeting soon. There will be a State Society meeting in Atlantic City before many weeks have passed. Perhaps you belong to a specialty association or a hospital staff society. No one is diverting your mail or standing guard at the door to keep you out.

Welcome, thrice welcome.

M.D. in the Comics

Latest in the "Entertaining Comics" series is a luridly colored, 7 by 10 paper called M.D. Its letter-to-the-editor page is called *The Needles*. In the first issue this page includes a copy of the Hippocratic Oath and an acknowledgment to a surgical instrument manufacturer for "technical assistance."

The general tone is theatrical, and medical items are oversimplified and over-dramatized. Thus, on the first page is a picture of a repulsive-looking ape-man, under which is written "Infectious diseases, accidents, old age, all of these resulted in AGONY . . . humanity stood helpless in the face of disease . . . in the days before modern medicine." There are strips which show the operations of prehistoric medicine men, the advancing front of the bubonic plague, the development of anesthesia, and growth of hospitals. The authors delight in the gruesome phrase ("your leg is rotting," "mankind remained in agony" and the like). There are also several stories—one of a girl whose leg had to be amputated, one account of an emergency tracheotomy and another of an appendectomy. Even the economic problems of the physician are considered and patients are chided for calling the doctor first and paying him last. Throughout these pages of exaggeration, excessive color and lusty language, runs the thread of the heroism of the physician.

It is a curious commentary on education and on our public relations. Shall we condemn this and its sister publications for their cheapness, their appeal to crude thrill-seekers and their fantastically overdramatized language? Or shall we say that here is the one medium of popular appeal that will really work, and that we are simply too proud to use?

The same company just announced two new magazines. One is called "Psychoanalysis." The other is called "Mad." We can hardly wait . . .

Geriatrics and General Practice

New Jersey was the birthplace of the American Geriatrics Society. It was founded at Atlantic City in June 1942. The idea, of course, is old. The very word, *geriatrics* was dreamed up by Ignatz Nascher as far back as 1909. The word was constructed on the model of *pediatrics*: physician of the aged, physician of the child.

Life expectancy at birth was only 22 years back in the days of Cicero. Today, the figure is 70. There was little need for geriatrics a century ago. There is great need for it today. As a science, geriatrics is the youngest of the medical disciplines. This has given it the advantage of being born into a medical world which puts stress on integration, on total treatment of people rather than partial treatment of organs. So from the beginning, geriatrics has encompassed not only the treatment of diseases of the senium, but also such matters as rehabilitation, social aspects of aging, psychologic problems associated with seniority and so on.

A geriatrician must be a general practitioner.

In one day he may have to concern himself with an enlarged prostate, a senile psychosis, a decompensated heart, a severe pruritus, a cataract, a fractured hip, and a diabetes. Just as the pediatrician is the family doctor to the child, so the geriatrician is the family doctor to the aged. Geriatrics is not so much a specialty as an integration of specialties. Without a family doctor or general practitioner to captain the team, the corps of specialists would have the senior citizen fragmented into as many parts as his years.

One of the by-paths of geriatrics is its preventive aspects. But to prevent certain diseases of the old, means to do something to people in middle life. So the geriatrician has to reach back into earlier life and, in this respect, must be bolder than the pediatrician who has to set a cut-off date for himself.

The child welfare movement, the child-centered home, and doting attitudes of parents towards their children have given to American boys and girls the happiest childhoods in the world. Neglect is one of the harshest indictments that can be returned against an American parent.

Let us not, however, fall into the reciprocal sin. Let us not be guilty of neglect of parents. Companionship, affection, comfort and a sense of usefulness are desiderata of old age. When the grown sons and daughters fail to provide their parents with those things, they are as guilty of neglect as if they had starved them. The children's charter is a precious document in the American heritage. It is time for some one to write a charter for grandparents. And these same words may well be engraved on that charter: companionship, affection, comfort and a sense of usefulness. Small rewards indeed for a life-time of service!

Stockpiling Human Parts

With the new Stokes freeze-drying unit* you can now stock-pile arteries for grafting. We already have facilities for stocking an inventory of blood, eyes, and skin. It should not be long before we can accumulate stock piles of kidneys and livers. And just around the corner is the final triumph of all, a stock-pile of brains.

The mechanistic principle—the thesis that the human body is but a machine—is well illustrated in this concept which implies that the practice of medicine is largely a matter of finding the right spare part to fit in. Unfortunately—or maybe most fortunately—the human body is not just a machine. The one disease entity which is most threatening to life today is the chronic ailment. The one which produces the greatest disability is mental disorder. These are not well understood if they are visualized only as mechanical breakdowns. The human body may be a machine, but it is a machine haunted by a spirit—sometimes a mean spirit, but often enough a noble one. And an ever-mounting stock-pile of spare parts has little to offer the ghost in this machine. But it is this ghost which pulls the levers after all.

*F. J. Stokes Machine Company, Philadelphia. Appropriately, it is a *machine* company which enters this field.

JEROME B. FORMAN, M.D.
East Orange

Strictures of the Common Bile Duct

Stricture of the common bile duct is a preventable accident, and therefore an unnecessary one in most cases. The actual technic for avoiding this complication is here detailed by Dr. Forman.

STRICTURE of the common bile duct presents one of the most difficult problems confronting surgeons. This challenge continues in spite of the innumerable types of repair described in recent years. Most strictures are avoidable. They occur as operative accidents, most often during gall bladder surgery.[1,7,8,13] The number of strictures which require repair indicates that the general principles of prevention still need repetition. If a stricture develops, the expectancy of life in an otherwise healthy individual is definitely shortened.

Cause: The common factors causing strictures of the common duct are surgical trauma, external trauma, primary inflammatory processes, adhesions, foreign bodies, congenital anomalies and fibrosis of the ampulla of Vater. Surgical trauma is the commonest cause. This trauma may be due to biliary tract surgery, due to gastro-intestinal surgery, or due to inflammatory processes resulting from right upper quadrant abdominal surgery. From 60 to 90 per cent of strictures of the common duct are due to operative trauma.

Hemorrhage from the cystic or hepatic artery is the most common accident causing injury to the duct. The cystic artery is shorter than the cystic duct, coming off as it usually does across the angle made by the junction of the hepatic with the cystic duct. Thus traction on the gall bladder (especially in cholecystectomy) is transmitted to the shorter cystic artery, whereby it may be torn from the hepatic artery. Vigorous bleeding ensues. If the surgeon tries to apply a clamp to halt the hemorrhage, he may crush the common duct.

Confusion about the anatomy at the junction of the cystic, common and hepatic ducts has led to traumatic stricture. This is especially true where operations for acute cholecystitis are performed and the landmarks have been obliterated by inflammatory processes.

Anomalies which cause uncertainty about the relationships between the ducts and the vessels in this region, may also lead to damage to the common duct. In these injuries, the duct may be ligated by tenting it. Sections may actually be removed. A part of the common, common and hepatic, hepatic, or anomalous ducts may be excised in this way. The pancreatic portion of the common duct is rarely injured because it is so well protected by the head of the pancreas.

The common duct may become obstructed by thickening and fibrosis due to spillage of bile. Bile is irritating to tissues.

Inadequate exposure, inadequate relaxation and poor anesthesia cause their share of injuries too.

Prevention: These injuries can be mini-

mized if great care is exercised in putting traction on the gall bladder and in dissecting the cystic artery before it is ligated. The cystic duct should not be clamped or cut until the cystic artery is ligated and divided. If hemorrhage does occur, introducing a finger into the foramen of Winslow and compressing the hepatic artery between the index finger and the thumb will usually control the bleeding and permit the operator to ligate the vessel.

Wide exposure, a dry field, good light, accurate demonstration of the bile passages and cystic artery, and good muscular relaxation will help prevent common bile duct strictures. In addition, bile, if spilled during the operation, should be carefully and completely removed.

Diagnosis: The diagnosis may be a matter of differentiating stricture from common duct stone. The history obtained from stricture patients is usually one of a previous operation in the right upper quadrant of the abdomen, followed by an obstructive type of jaundice, pain, chills and fever. In addition, there is usually a history of prolonged biliary drainage from a biliary fistula after a previous operation. This drainage may last for weeks or months. When the fistula closes, signs and symptoms of biliary tract obstruction ensue. Where the common duct is partly crushed, symptoms of jaundice are usually delayed. In this instance, there is no postoperative biliary discharge and fibrosis occurs three to four months after injury. If the duct is completely divided and ligated, the symptoms of jaundice, chills and fever may be immediate.

Pre-operative Management: The usual precautions should be observed prior to subjecting the patient to operation. Anemia, avitaminosis, hypoproteinemia, fluid imbalance and other abnormalities are corrected. Vitamin K is administered whether the prothrombin time is elevated or not. Antibiotics are given for several days pre-operatively.

Anesthesia: Walters[13] finds no evidence that a general anesthetic or combined nitrous oxide, ethylene, oxygen or ether is disturbing to liver function.

Operation: A right rectus incision is usually made. The dissection is kept close to the undersurface of the liver and is extended as far laterally as possible to expose Morison's pouch. From here the dissection is carried mesially until the hepaticoduodenal ligament is reached. After exposure of the hepatic artery in the hepaticoduodenal ligament, it is usually possible, by upward traction on the undersurface of the liver, and by dissecting into the hilum of the liver, to find the proximal stump of the common or hepatic duct. When strictures are being identified at the hilum, the hypodermic needle and syringe can be helpful.

Repair: Where the duct is continuous but contains a stricture in a short portion, the Heineke-Mikulicz operation offers the best result. The stricture is opened longitudinally. This incision is closed transversely, thereby increasing the diameter in the area of obstruction. If the patient is debilitated or offers a poor risk, the simplest form of therapy is the single dilatation. Temporary relief occurs but is short-lived and a recurrence is probable.

Maintenance of the function of the sphincter of Oddi is desirable. If there is no sphincteric action it is felt that regurgitation of intestinal contents occurs and an ascending cholangitis results.[4] However, Cole[2] and Walters[13] have been unable to prove that any reflux from the intestine caused liver infection. They feel that some degree of obstruction is primarily required.

CERTAIN procedures have now been discarded because of poor results. These include: the re-implantation of biliary fistulous tracts, the Wilms-Sullivan operation and the bridging of defects with substitute material.

Fistulae in general have a great tendency to close spontaneously. In addition, secondary fistulae frequently occur. This lowers the pressure necessary to maintain them.

In the Wilms-Sullivan operation and its modification, the defect is bridged by a rubber tube, vitallium or silicon (bouncing clay), which is then surrounded by omentum. For the tube to remain open it must have an independent blood supply and a mucosal lining. Regeneration from each cut end is minimal and insufficient to epithelialize a gap of any

significant length. The midposition is therefore fibrous and tends to constrict.[4] In addition, the substitute tubes frequently become plugged with inspissated bile and mucus.

Grafts of viable structures such as vein and ureter have also been used to bridge defects. These have also failed probably because these tissues have not had an independent blood supply. Recently Kirby *et al.*[6] have employed an isolated segment of jejunum in dogs. This operation shows promise in that the jejunum will have both an independent blood supply and a mucosal lining. It has been found that stricture formation, biliary stasis and cholangiohepatitis did not occur in animals observed up to 13 months after operation.

The most desirable repair, if technically feasible, is an end-to-end choledocho-choledochostomy as advocated by Lahey.[1,7,8] One of the basic principles is mobilizing the distal portion of the common duct from the head of the pancreas. The anastomosis is made over a T-tube which is brought out through a vertical incision either above or below the anastomosis of the common duct. If the T-tube is brought out through the anastomosis, stricture formation recurs in a high proportion of patients. The T-tube is left to splint the anastomosis for a minimum of one year.

If it is not feasible to mobilize the pancreatic portion of the common duct, a biliary intestinal anastomosis can be performed. This includes choledocho-duodenostomy, choledocho-jejunostomy and hepatico-enterostomy. Results have been good in most cases.

A variant, described by Hoag,[15] consists of the formation of a mucosal gastric tube which is anastomosed to the biliary system. Whipple [13] has described a choledocho-jejunostomy made in the Roux-Y fashion. The jejunum is divided 6 to 12 inches from the ligament of Trietz. The distance between the anastomosis and the end of the upright limb varies from 6 to 24 inches; a minimum of 12 inches being desired to prevent reflux.

Where no extrahepatic duct can be located, Longmire [9] has devised an operation whereby part of the left lobe of the liver is excised until a large duct is found and an anastomosis is then made between the duct and a loop of jejunum.

All procedures are required to have a careful mucosa to mucosa approximation.

Results: A good surgical result depends on the type of injury, the number of previous attempts at repair, the type of repair, the care with which the repair is performed and how soon the repair is done after the stricture forms.

In general, the results have shown a remarkable improvement in the last 15 years. Mortality rate at present varies between 4 and 7 per cent. Previously it was prohibitive. In 1936 only 25 per cent of the cases remained free of symptoms after repair was done. The overall ratio of good results at present is about 80 per cent. Best results are obtained in the crush type of injury if the remaining ducts are intact. The poorest results are obtained where many previously unsuccessful operations have been tried.

Some of these are itemized below:

	% Good	% Poor
Heineke-Mikulicz	100	0
Dilatation and Tube Implant (Pearse)	80	20
Defect Bridged by Tubes and Omentum	20	80
Hepatoduodenostomy (Walters)	64	36
Mucosal Gastric Tube (Hoag)	72	28
Biliary-intestinal Anastomosis	73	27
Roux-Y Choledocho-jejunostomy	78	22
End to End over T-tube (Lahey & Cattel)	80	20

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Postmortem Skin Donations May Save Lives

A person who dies can save the life of another who probably would die without his help. So say Brown and Fryor of Washington University School of Medicine in the November 20 (1954) J.A.M.A. They report that skin taken after the death of a donor can carry a severely burned person through an emergency period during which he could not possibly stand to have grafts taken from unburned parts of his own body. Without the emergency aid, these badly-burned persons probably would die.

This technic has been used only on a few patients. But they said their success so far has led them to make their report without waiting for "an impressive array of patients with adequate percentages" because they believed other physicians could "save lives that might be lost" if the report were made promptly.

In the meantime, an "unlimited source" of lifesaving grafts is going to waste, they said. The main problem is to gain general public acceptance of giving skin "to save the life of another patient."

They said immediate survival of deep, extensive burns has been increased with better control of shock, but that the patient's chances of surviving beyond the initial shock for more than a few weeks have not been improved.

"The patient can die only once; and whether death occurs on the 10th day or the 30th does not change the death rate," they said. Death in such cases has been caused largely by extensive open wounds which could not be closed by transferring grafts of the patient's own skin. These patients are not strong enough to stand this procedure. They may not even have enough undamaged skin for grafts.

The problem could be solved by temporarily grafting skin taken from a donor who has died within several hours before the procedure. The skin can be preserved for at least a month with technics now being developed. The process eliminates the disadvantages of live donor grafts.

These skin grafts will "take" even if only held in place by a wrapping of greased gauze. This closes the wounds and protects them from infection until the patient has passed the critical period. Later "permanent, complete healing" with restoration of contours, movability and features can be done with the patient's own skin or with live donor grafts

They said they found a simple explanation of the need for skin made to relatives of a possible donor, has been enough, but that a visit to a burned patient or display of photographs might supplement the appeal. They explained that grafts are taken only from areas normally covered by clothing and do not disfigure the donor.

Postmortem grafts could make a life-or-death difference and "there can be little reason to let this important source of skin go to waste," they said. "The procedure could be developed on a national basis, possibly saving many lives in the event of widespread disaster."

The principle could be used in the armed services. Each serviceman's permission for removal of skin in case of death could be recorded, making available an unlimited source of the best temporary coverage for severe and widespread burn wounds. Civilian needs might be supplied and administered by a central agency in the same manner as blood banks.

"Public acceptance could be counted on if there were developed a realization of the need for usable skin and the fact that a great deal of lifesaving skin is going to waste."

Joseph P. Donnelly, M.D.
Jersey City

Are There Medical Indications for Therapeutic Abortions?*

The traditional "indications" for therapeutic abortion are here reviewed. Evidence is cited to show that such abortions are not justified in tuberculosis, carcinoma, mental disease, multiple sclerosis, hyperemesis, and heart disease. Acute toxemia superimposed on hypertension is considered the only valid medical justification, and then only after a trial of pregnancy. The good morbidity and mortality figures at the Margaret Hague Hospital are contrasted with its extraordinarily low therapeutic abortion rate (1 to 17,500 deliveries).

It was with a great deal of pleasure that I accepted this invitation to present this analysis of our experience in therapeutic abortion at the Margaret Hague Hospital in Jersey City. Many of you will disagree with our management of this problem. However, the attitude of the Margaret Hague Clinic is based on firm medical principle. Our low incidence of therapeutic abortion has certainly not brought about a higher incidence of maternal mortality.

THE MORAL ISSUE

It is necessary for every practitioner to have for himself definite ethical standards against which he may measure the right or wrong of any particular problem. As to abortion the civil law is different in the different states and cannot act as a guide for the whole medical profession. Likewise, the profession will not accept the teaching of any particular religious body because unfortunately there is enough difference in the attitude of the various churches to make specific religious teaching in respect to particular doctrine a difficult basis for an approach to certain ethical problems. The codes of the American Medical Association and the American College of Surgeons are not specific enough for a definite guide. Charles Gardner Child in his 1931 monograph on therapeutic abortion wrote the following summary:

1. Life is present from the time conception first occurs.
2. The fetus is a living independent being with the right to exist which is common to all human beings and is entitled to the protection of the state.
3. The direct taking of innocent life is murder or homicide at whatever stage of existence it is committed.
4. All religious and legalistic codes believe that murder or homicide is sometimes justifiable. For example, a policeman who kills a robber, a soldier who kills to defend himself and the country in time of war, and a state executioner who hangs a guilty murderer commit justifiable homicide.

*Read at the Annual Meeting of The Medical Society of New Jersey, May 19, 1954.

All of these take the lives of another individual. But the taking of life must always be justified before the law. Is the taking of another's life by therapeutic abortion ever justifiable? A great majority of medical practitioners of high scientific attainment believe that it is. The opinion is based on the idea that under some circumstances the existence of the pregnancy is a definite, direct and imminent jeopardy to the mother's life, and that the pregnancy in this case, or the fetus, may be classified as an aggressor. This question of imminent lethal risk to the mother's life seems to be the important consideration. There is a wide and increasing tendency to include in the evidence justifying therapeutic abortion such secondary considerations as:

1. A remote threat to the mother's life.
2. A threat to the health of the mother.

Such broadening indications for justifiable feticide tend to practical removal of all that is deterrent to this practice. Individual opinion as to threat to the mother's life may vary within the widest limits. Indeed, it has been suggested that any pregnancy is a risk to the health of a woman and if this risk be considered as a threat to the mother's life, then there would be no bar to the induction of an abortion in any pregnancy. So much have these secondary considerations become acceptable in some of the outstanding teaching clinics in the country today that so-called "therapeutic" abortions are being done in 1½ per cent of the total deliveries. Incidence of 1 to 165 or even 1 to 65 is not uncommon. A few years ago the yearly report of one large teaching clinic had an incidence of 1 therapeutic abortion to every 35 deliveries. At the Margaret Hague Hospital we have performed 8 therapeutic abortions and approximately 140,000 deliveries from 1931 to this date. This is an incidence of 1 in 17,500.

There have been a few other cases where therapeutic abortion has been discussed with the patient and the patient has refused to submit to the operation because of religious and moral reasons. But even if these few cases were included, there would still be a great difference between our incidence and that of other hospitals.

MEDICAL REASONS

Hyperemesis Gravidarum: We have performed one abortion for hyperemesis gravidarum in these 23 years. That occurred in 1939. This patient was again pregnant in 1941. She returned to our hospital and was admitted with the diagnosis of hyperemesis. She was again treated with glucose and psychotherapy and was delivered at term of a healthy child. It would seem, therefore, that the abortion in her 1939 admission was not justified. *We have not had any maternal deaths from hyperemesis in* 140,000 *deliveries.* We do not believe that therapeutic abortion for hyperemesis is justified.

Pyelitis: For many years our cases of pyelitis were treated with indwelling catheters and urinary antiseptics. They were often very difficult problems. However, since the use of sulfa drugs and the other antibiotics, pyelitis is no longer a serious complication of pregnancy. There is now no need for a therapeutic abortion in these cases.

Tuberculosis: Because our next door neighbor is the Hudson County Tuberculosis Hospital, we see our share of cases of tuberculosis. Recent advances of the treatment of pulmonary tuberculosis, both by surgical and medical technics have led many people to conclude that the interruption of pregnancy for tuberculosis is *not* necessary.

Schaefer and Epstein recently reviewed the case histories of 63 patients who had therapeutic abortion for advanced pulmonary tuberculosis. They found that the mortality rate was higher than in a similar number of cases of advanced tuberculosis who had had full-term deliveries.

Cosgrove and Krueger in a review of 128 pregnancies in our hospital concluded that there was no evidence that pregnancy or delivery exerted a deleterious effect on pulmonary tuberculosis.

Bowles and Domzalski state that every investigator since 1916 has consistently found that *pregnancy has no harmful effect on pulmonary tuberculosis.*

We have not done any abortions because of tuberculosis and we have not had any deaths from tuberculosis in the last 56,000 deliveries.

Mental Disease: We have had very little experience with pregnancy complicated by mental disease. However, it is very doubtful that the interruption of pregnancy will cure any psychotic or psychoneurotic state.

Ebaugh and Heuser have said that ideas of guilt and self-deprecation, centering around infanticide, might well disturb a poorly integrated personality to a psychotic degree. You have all met the patient who for years after an induced or therapeutic abortion had profound guilt feeling. It would be my impression that many more women have been admitted to institutions because of mental disease initiated by psychic scars of abortion than there have been women cured and discharged from the institution by the performance of therapeutic abortion. We have not done therapeutic abortions in these cases.

Carcinoma: Treatment of this condition is essentially the same in the pregnant as in the non-pregnant woman; we treat the disease and forget about the pregnancy. If abortion should occur it is incidental to the radium or x-ray treatment or surgery and there is no reason to classify it as a therapeutic abortion.

Multiple Sclerosis: Fifty years ago Von Hoesslin on the basis of only four cases wrote in the German literature that multiple sclerosis was aggravated by pregnancy and that therapeutic abortion should be performed. This statement kept recurring in the literature and therapeutic abortions have been performed because of multiple sclerosis. In the last five years, Tillman at the Sloane Maternity Hospital and Sweeney at Cornell have reviewed their cases and have been unable to discover any deleterious effect of pregnancy on multiple sclerosis or *vice versa*. Our experience in a few cases has been similar. We have not done any abortions for multiple sclerosis.

ECONOMIC AND SOCIAL REASONS

CAN the patient afford to have another child? Will the older children have sufficient educational opportunities if their parents have another child? Aren't three children enough? This one won't be missed. I'm afraid that such statements are frequently made in the discussion of a proposed therapeutic abortion. I will grant you that these social and economic factors are seldom put down on the record as the primary indication for abortion. But they are frequently "secondary" indications and too often influence the physician. Don't you think it was fortunate for American medicine that Sir William Osler made the rounds of some of our larger American clinics as a full-grown professor of medicine instead of as a six-weeks' fetus, the unborn son of a para-8, gravida-9 wife of a very poor man? How many of the students of any medical school, many of whom were born at the depths of depression around 1930, would have been considered good economic risks at the time of their conception? How many of you or your fathers or grandfathers were good economic risks? Let us continue to be doctors and not pose as false prophets. Let us believe that this is still a land of great opportunity. Let us not deny a life in America to any unborn child, simply because his parents are as poor as our forebears once were.

One should have one good reason for doing a therapeutic abortion. Three or four minor ones do not add up to one good one. After twenty years we at the Margaret Hague Hospital are very happy, that as to the above indications for therapeutic abortion, we are now in agreement with the majority of the larger clinics in the country. Of course I believe that therapeutic abortion will continue to be done for the above reasons in many of the small private hospitals, and sanitariums for many years to come.

I sincerely hope that in another ten years we will again find ourselves in agreement on the next two indications for therapeutic abortion: namely hypertensive disease and rheumatic heart disease.

HYPERTENSIVE DISEASE

Patients with fixed hypertension sometimes present complications due to a superimposed toxemia of pregnancy which is an imminent threat to the mother's life. This is considered as an indication for the interruption of pregnancy. However, not all cases of hypertensive disease should be aborted. Chesley and Annitto, in a review of 218 hypertensive patients through 301 pregnancies in our hospital, made the following observations:

1. Forty per cent of the patients showed a significant drop in mid-pregnancy blood pressure.
2. Fifty per cent went through the pregnancy with essentially constant blood pressure.
3. Two-thirds of our patients went through pregnancy without superimposed pre-eclampsia. There were no immediate maternal deaths in this group.
4. However, among the third of the hypertensives whose pregnancy was complicated by pre-eclampsia, there were six maternal deaths or 7 per cent. If we could only determine which patients would escape superimposed pre-eclampsia, a good prognosis could be offered to 2 out of 3 hypertensive women.

It is possible that the termination of pregnancy at the first sign of developing-toxemia should protect the patient from the effects of the toxemia If this were so, then we can offer a hypertensive woman a chance of pregnancy. She may be given a so-called "trial of pregnancy." We have interrupted four pregnancies because of hypertensive disease. There were two immediate deaths. The third patient died of cerebral hemorrhage six years after the abortion. The fourth patient was aborted in the Margaret Hague Hospital in 1931 for severe hypertensive disease. She again became pregnant in 1932; refused to be aborted and was delivered at term of a normal baby. In 1935, at the Peck Memorial Hospital, she was aborted and had a tubal ligation. In 1936 she had an ectopic pregnancy. In 1945 she had a Smithwick operation which was unsuccessful.

In 1952, twenty one years after the therapeutic abortion she is still hypertensive, alive and well, having had a living child in the interim. I doubt if the abortion in 1931 was necessary since she had no signs of pre-eclampsia at that time. We cannot expect to cure a patient of hypertension by abortion. The most we can do is to cure a patient of a superimposed pre-eclampsia by terminating pregnancy. Therefore, a hypertensive pregnancy should be allowed to continue until there is evidence of a superimposed toxemia of pregnancy. The pregnancy itself does not have a deleterious effect on hypertensive disease. Chesley, on a follow-up on 218 patients over a fourteen year period has shown that there is no increase in the annual death rate of those hypertensives who have had 4, 3 or 2 pregnancies over those who have had only one pregnancy. He concluded that repeated pregnancies in hypertensive women have not significantly increased their annual death rate. Therefore, we believe that if the patient has hypertensive disease she should be allowed to continue in pregnancy until there is a superimposition of pre-eclampsia—in other words until they develop proteinuria, edema or a further rise in blood pressure.

RHEUMATIC HEART DISEASE

Two therapeutic abortions for rheumatic heart disease have been performed in the Margaret Hague Hospital, both in 1935. The first patient died four days after the operation. Since the analysis of 345 of our cardiacs was published in 1941 by Gorenberg and McGeary, we have not done cesarean sections or therapeutic abortion for rheumatic heart disease. Instead six rules have been set down in the care of pregnant cardiacs.

1. Extra bed rest, especially in the last three months, for all pregnant cardiacs.
2. Weekly visits for the cardiacs who are twenty-five years old or over.
3. Immediate hospitalization for Class III and Class IV cardiacs and absolute bed rest until after delivery.
4. Immediate hospitalization for the patient with a history of cardiac failure with absolute bed rest until after delivery.
5. Immediate hospitalization on first suspicion of decreased cardiac reserve. In the clinic we do not treat colds, bronchitis, sinusitis.

and so forth, in a cardiac. We think that the only thing that can happen to a pregnant cardiac, is heart failure until proved otherwise.

6. Cesarean sections are performed for obstetrical indications only. The most recent analysis shows that the incidence of cesarean section in our clinic cardiacs is 1.3 per cent against an over-all hospital incidence of 4 per cent.

Since 1939 our cardiac clinic (except for a four-year period while Dr. Gorenberg was in service) has been conducted on the foregoing basic principles with the following result. Over five hundred consecutive cardiac patients have been guided through their pregnancies. Failure has occurred in less than 1 per cent of these patients. Only 2 patients (which is less than 0.5 per cent of the total) died. This total includes every pregnant woman with rheumatic heart disease who registered in the out-patient clinic at any time prior to delivery and prior to cardiac failure. Not a single therapeutic abortion was done. Furthermore, these 500 pregnancies represent 450 patient years' exposure to the risk of death from rheumatic heart disease. Two deaths in this series give an annual death rate of 4.4 per thousand. The annual death rate of rheumatic cardiac women generally in the child-bearing age is 26 per thousand which is 6 times the annual death rate on our clinic for cardiacs. In other words, it would seem that *pregnancy has reduced the risk of death.* Is pregnancy good for heart disease or is it because pregnancy brought these patients under the care of a cardiologist during gestation? We conclude that a pregnant cardiac under the care of a cardiologist and obstetrician is as good a risk as a non-pregnant female of the same age.

Now what is the remote prognosis? Is there any validity in the argument that although certain measures may be successful in overcoming the dangers of pregnancy, nevertheless the patient with heart disease, who becomes pregnant shortens her life expectancy?

JENSEN in 1938 showed that the average age at death was essentially the same in nulliparous as in parous women with rheumatic heart disease. Gilchrist and Murray-Lyon compared autopsy records and came to similar conclusions.

Jensen's review of the literature elicited no evidence that an increase in the number of children lowered the average age of death. Then he writes: "It may be finally concluded that whatever method is used it fails to show conclusively that pregnancy materially alters the course of rheumatic heart disease."

Recently Gorenberg and Chesley completed a study of all patients with rheumatic heart disease delivered at the Margaret Hague Maternity Hospital from 1937 to 1942. This important paper (which I believe is the most interesting study which has ever come out of the Margaret Hague Clinic) appeared in the first issue of the new *Journal of the American Academy of Obstetrics and Gynecology*. The study was completed in 1951, and represents a ten-year follow-up of 260 cardiac patients. In the follow-up study of 260 cardiacs, there is no increase in mortality with increased parity.

TABLE 1.† REMOTE MORTALITY IN RELATION TO PARITY

Parity at Follow-up	1	2	3	4	5	6 or More	Totals
Cases	49	67	53	39	25	27	260
Dead	18	17	11	9	11	6	72
Mortality (per cent)	37	25	21	23	44	22	27.7

It may be objected that one-half of the patients were multipara in 1937 to 1942 and there has been a selection of cases. To control this, Gorenberg and Chesley made an analysis of the patients who had their first pregnancy during the base period. They found that the mortality for these patients was progressively lower for each increment of parity. They also found that the age of death or at follow-up is not decreased by repeated pregnancies.

TABLE 2.† STATUS AT FOLLOW-UP IN RELATION TO PARITY, IN PATIENTS HAVING THEIR FIRST PREGNANCIES IN THE FIVE YEAR BASE PERIOD

Para:	1	2	3	4 and More	Totals
Cases	48	41	22	18	129
Dead	18	10	3	2	33
Mortality (per cent)	37.5	24	13.6	11.1	25.2

†Tables published by permission of Gorenberg & Chesley from their studies of rheumatic heart disease in pregnancy.

Auricular fibrillation is certainly a serious complication in rheumatic heart disease and is frequently used as a "justification" for therapeutic abortion. There were 15 such cases and seven of them lived for ten years. Average length of survival was 7.8 years. This length of survival is greater than the length of survival given for non-pregnant patients with auricular fibrillation in many textbooks.

WE ARE not doing therapeutic abortions for rheumatic heart disease at the Margaret Hague Maternity Hospital. We do not believe that the record of 500 consecutive cardiac pregnancies with two maternal deaths can be improved by increasing our incidence of therapeutic abortion.

Connell's recent review of our maternal mortality (which is a little less than 1 maternal death per 1000 deliveries) shows that rheumatic heart disease is now the number-one cause of maternal death in our hospital—as it is in other clinics in the northeastern states. This is due to the fact that, in addition to the attending staff of some 16 obstetricians, there are approximately 300 doctors, mainly general practitioners, who send patients to the Margaret Hague Maternity Hospital. In the early days of the hospital, toxemia was always the first or second most frequent cause of maternal death. It was only by repeated warnings and education that the physicians were alerted to the need for hospitalizing the toxemias when they first showed signs of the disease.

They are now alerted to the seriousness of rheumatic heart disease, and more and more they are asking for earlier consultation with the cardiologist. They are increasingly admitting patients to the hospital for clinical evaluation.

The death rate of private pregnant cardiacs is 20 times greater than the clinic cardiacs. This discrepancy, I am sure, will be eliminated in the years to come, just as it was in the case of toxemia. In the last 56,000 deliveries there was only one toxemia death per 6,300 deliveries, while there was one toxemia death per 1,700 deliveries in the first 66,000 cases.

The incidence of failure and death in the patients in our cardiac clinic is as good, if not better than it is in most other clinics where therapeutic abortion is frequently done for rheumatic heart disease.

We do not believe that patients who happen to die in our hospital, but who have *not* received the treatment for heart disease which we have outlined, should be charged against our system of treatment, any more than deaths due to pneumonia in patients who have not received antibiotics, should be charged against the antibiotic treatment of pneumonia.

COMMENT

WE HAVE performed only 8 therapeutic abortions during 140,000 deliveries at the Margaret Hague Maternity Hospital. Our maternal mortality in the last 56,000 deliveries is a little less than 1 per 1,000. This is just as low as that in other large city or county hospitals or similar institutions throughout the United States where therapeutic abortion is much more frequently performed.

It would seem that it might act as a deterrent to clinics which have a very high incidence of therapeutic abortion, if therapeutic abortions were included with antepartum, intrapartum or neonatal deaths in calculating an overall fetal mortality. It would seem that a fetus which is deliberately killed regardless of its period of gestation, should be included in fetal mortality just as is done with a fetus dying because of an accident of childbirth.

If we had performed therapeutic abortions on one per cent of these cases (which is not an uncommon incidence among clinics reporting during the last 20 years) then we would by now have terminated the lives of 1,400 children. Even allowing for a large antepartum, neonatal, infant and annual death rate, there are probably about 1,000 people alive today who would not be alive if our incidence of therapeutic abortion was 1 to 100 instead of 1 to 17,500 deliveries.

CONCLUSIONS

1. Hyperemesis gravidarum, pulmonary tuberculosis, multiple sclerosis, pyelitis, mental disease, rheumatic heart disease, and economic or social reasons are no longer valid indications for therapeutic abortion.

2. Pregnant patients with hypertensive disease may be given a "trial of pregnancy." Pregnancy should be terminated only if an acute toxemia of pregnancy is superimposed on the hypertension.

3. Since 1939 in our cardiac clinic we have seen over 500 pregnant cardiac patients. In this group no therapeutic abortions were performed and there were only two deaths. The annual death rate in this series was 4.4 per thousand which is about a sixth of the annual death rate in non-pregnant cardiacs of a similar age group. Therapeutic abortions would not have prevented these two maternal mortalities.

4. Therapeutic abortion is a highly dangerous procedure. It has a fetal mortality of 100 per cent, and an immediate maternal mortality of 5 per cent (Moore). We believe that its frequent use in many clinics is not justified. They have not shown significant reduction in their maternal mortality because of therapeutic abortion.

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Answer Medical Practice Questionnaire

By now every member has received a letter from the Subcommittee on Medical Practice, enclosing a questionnaire dealing with corporate medicine. The Medical Society of New Jersey takes pride in the fact that it is a democratic organization and that the opinions which it officially expresses are indeed the opinions of the membership. Please do not disfranchise yourself by throwing this questionnaire away. Reply promptly so that your voice may count. If you have misplaced your copy of the questionnaire write to the Executive Offices for an extra copy.

In this connection, please note the editorial on page 105 of this issue.

S. J. Fanburg, M.D.
Newark

Dermatologic Clues to Internal Disorders*

Pigmentation, pruritis and purpura are three of the ways in which skin lesions may reflect internal disorders. The skin is not simply a superficial varnish over the body. It is an organ: indeed, it is the largest organ in the body. Here, Dr. Fanburg shows how careful inspection of the skin may lead the practitioner to find previously unsuspected internal disorders.

The title of this paper was chosen to highlight the fact that the dermatologist is actually an internist with a special knowledge of skin disorders. The skin is an organ of the body just as important to it as the liver, stomach, or kidneys. A skin disturbance arises from an external or an internal cause or a combination of both. There are few, if any, intrinsic diseases of the skin. If the cause of an eruption is purely external, there are always predisposing constitutional factors. Not every cleaning woman develops a dermatitis of the hands, nor every surgeon a bichloride rash. Not every human being exposed gets ringworm or ivy poisoning. More is required than the mere operation of an external agent. A predisposition on the part of the patient is needed, and the significance of this is the presence of some anatomic, physiologic or metabolic characteristic which favors his liability to an illness to which his brother is not subject. The distinction between dermatoses considered "local" and dermatoses which are not is essentially one of convenience. It will not withstand the test of fine analysis. Diseases of internal organs or body systems are reflected in the skin, and the effects of primary skin disorders are, in turn, reflected to internal organs or systems. We may not always be able to detect the reciprocal relationships, but they are there. The skin is not simply a cloak or covering. It is an integral part of the organism, having blood vessels, lymphatics, muscles, glands, and nerves. All these structures are subject to the same disturbances that afflict other organs.

As the eye is poetically considered the mirror of the soul, the skin is the mirror of the interior. The images in the mirror, however, may not always be easily read or understood.

In determining the relationship between the internal organs and the skin, three possibilities must be considered: (1) The healthy skin may be affected by an anatomic or functional disturbance of an internal organ; (2) Conversely, an organic or functional disturbance of the skin may affect an internal organ; and, (3) Skin diseases and internal disturbances may be concomitant, either as a joint expression of some underlying systemic disease or as a purely coincidental occurrence.

*Read at the 188th Annual Meeting of The Medical Society of New Jersey, May 19, 1954.

I must first make a plea for a complete examination of the patient, in the nude, in a good light, following a detailed history. In making a diagnosis, the grouping of lesions, location, symmetry, color, and distribution are important factors. There is also an art in identifying an "overtreatment dermatitis," a drug eruption, or a self produced eruption. This is learned by training and experience plus a willingness to think of possibilities. An alert clinician will frequently make a diagnosis of a systemic disease by paying attention to changes in the skin. It is more of a satisfaction to make a diagnosis of a disease entity from observation of the patient than to rely chiefly on laboratory tests. The clinicians of fifty years ago were proficient in that art.

As this presentation must be limited, I will take as clues to internal disorders, only these three cutaneous symptoms: (1) Pigmentations, (2) Pruritus, and (3) Purpura.

PIGMENTATION

THERE are two general types of pigmentation; extrinsic, and intrinsic. The *extrinsic* type originates outside the skin. The *intrinsic* develops in the skin as a result of the activity of the basal cells. The color, a deposit of melanin, may be black or brown of various shades. I recall a patient referred to me after a thyroidectomy because of a peculiar brownish coloration in the form of a necklace in the region of the scar. The patient had refrained from using soap and water in the operated area for several months. The mysterious skin disease was merely a deposit of terra firma. A quick cure resulted at the first visit, which was a bit awkward to explain to the referring physician and to the patient. This is an example of extrinsic pigmentation due to improper skin care. Other forms may be due to dyes or colored compounds applied to the surface, or to colors produced by bacteria. Pigment deposits may also result from tattoos, silver in argyria, bismuth, iron compounds, carotene, and bile. I have observed a yellowish discoloration of the palms and nails which resembled that seen in carotinemia. However, after a certain hair tonic was discontinued, the discoloration faded away. Carotinoderma is caused by circulation of pathologic amounts of carotene in the blood due to ingestion of excessive quantities of carrots, oranges, egg yolk, pumpkin, squash, and certain other vegetables. Carotene is normally present in the stratum corneum and subcutaneous fat and imparts a yellow component to the normal skin. However, when there is an excess, the yellowness overshadows other colors. It is important to differentiate this from jaundice by its distribution in the naso-labial folds, palms, and soles; by its absence in the sclera; by normal bilirubin levels in the blood; and by the light color of the urine.

In hypothyroidism the skin is pale and often yellowish due to carotinemia. It seems likely that the liver is unable to form vitamin A from carotene due to the lowered metabolism, thus allowing the carotene to circulate and be deposited in the skin.

There is a small amount of bilirubin normally present in the blood and tissues, but it appears to play no part in normal skin color. The icterus index of the blood must increase from a normal of 5 to beyond 15 or 25 before it becomes detectable clinically. According to Jeghers [1] at the Boston City Hospital, jaundice was overlooked in routine clinical examination when the icterus index was around 50. Failure to examine the patients in good daylight was chiefly responsible.

The color of the skin in jaundice varies from faint yellow through deep yellow, saffron, yellowish green, green, and even bronze or dark brown. The tint of jaundice may be of some diagnostic importance. Lichtman [2] lists orange or saffron in intrahepatic jaundice, greenish to bronze in obstructive jaundice, green in intrahepatic jaundice in the presence of liver necrosis, and also in the receding stages of jaundice and olive green in cholangitis and cholangitic cirrhosis. The orange color has been theoretically attributed to bilirubin and

1. Jeghers, H.: Pigmentation of the Skin. New England J. of Med., 231:88 (1944)

2. Lichtman, S. S.: Diseases of the Liver, Gallbladder and Bile Ducts, Lea & Febiger, Philadelphia, 1942, page 152.

the green to biliverdin, the oxidation product of bilirubin. Using the Evelyn photo-electric colorimeter, Watson [3] quantitatively measured the amount of biliverdin present in the serum of various types of jaundice. It was not found in pure retention jaundice. Perhaps the absence of biliverdin accounts for the lemon yellow of the retention jaundice of pernicious anemia. In regurgitation jaundice, of whatever cause, some biliverdin was regularly noted. Only in jaundice due to cancer did it exceed one milligram per 100 cubic centimeters. These observations are in accord with the clinical impression that outspoken biliverdin jaundice is most frequently due to cancer of the biliary tract.

JAUNDICED persons who look bronze or brown may have, in addition, melanin pigmentation. Scratching from pruritus and avitaminosis, both commonly present with long persistent jaundice, are the most common causes for development of melanin pigmentation of the skin. In these cases the pigmentation will be seen in streaks where the skin has been excoriated.

Jaundice of prolonged duration in infancy may permanently stain with a green color the deciduous teeth forming during this time.[4]

Elastic tissue has a great affinity for bilirubin. This accounts for the ready pigmentation of the skin, sclera, blood vessels, and cornea which are rich in these fibers, and its persistence after other body tissues have cleared.

Meakins [5] and others have commented on the absence of jaundice in edematous areas. This curious phenomenon explains the mechanism of the unilateral jaundice syndrome reported by Page [6] who described it in two patients with cardiac failure and hemiplegia. Edema appeared only on the paralyzed side, whereas jaundice appeared only on the other side.

A wheal produced by injecting histamine into jaundiced skin increases capillary permeability for bilirubin so that the wheal is yellower than the surrounding skin. The yellowish line bordered by two red lines formed by stroking the skin lightly is a similar phenomenon which can be used as a simple skin test for mild or latent jaundice.[7]

Atabrine brings about a yellowish pigmentation of the skin which is now known to many physicians. The pigmentation may simulate jaundice and lead to diagnostic error. This is especially true if it persists for many months and the patient comes under the observation of a physician other than the one who ordered the drug. The pigmentation is noticeable within 3 to 10 days after beginning therapy and may persist for many months after the medication has been stopped. The pigmentation is diffuse and most prominent on the backs of the hands, arms, and feet. It appears on the forehead and face and may form a golden ring around the mouth.[8] Pigmentation of the sclera is usually absent. A deep yellowish fluorescence of the nails under the Woods light is seen only in atabrine pigmentation and is of diagnostic importance.

In Addison's disease, there is a diffuse pigmentation quite pronounced in the armpits, about the nipples, genitals, mucous membranes, and palmar creases. Pigmentation about the knuckles may be the first manifestation. Any area subject to friction may take on a darker color than the rest of the skin. Garters, girdles, shoulder straps, and collars may leave indelible marks. Vaccination scars may darken early in Addison's disease.

In diabetes the darkening of the skin is usually diffuse with no areas particularly darker

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3. Watson, C. J.: Bile Pigments. New England J. of Med., 227:665 (1942)

4. Boyle, P. B. and Danerman, M.: Natural Vital Staining of Teeth of Infants and Children. Am. J. of Orthodontics, 27:377 (1941)

5. Meakins, J.: Case Showing Unusual Distribution of Icteroid Pigmentation. Canad. M.A.J., 15:402 (1925)

6. Page, I. H.: Ipsolateral Edema and Contralateral Jaundice Associated with Hemiplegia and Cardiac Decompensation. Am. J. Med. Sc., 177:273 (1929)

7. Leslie, A.: Simplified Bedside Test for Latent Jaundice. J. Lab. & Clin. Med., 28:6 (1942)

8. Schechter, A. J. and Taylor, H. M.: Atabrine Pigmentation. Am. J. M. Sc., 192:645 (1936)

than others. In hypertrophic cirrhosis of the liver, accompanied by diabetes, the diffuse brown discoloration is caused by the deposition of a blood pigment and is not due to bile or melanin.

The localized pigmentations of the face, known as cholasma or "liver spots," are not necessarily expressions of hepatic disease, although they may be. They are round or oval macular patches on the forehead or malar regions. In some cases there is an associated functional or organic change in the female genital apparatus, particularly at the menopause. These spots are also frequently seen during pregnancy and probably have some relationship with the adrenal glands and vitamin C metabolism.

Intestinal polyposis may be associated with jet black melanin pigmentation in dots about the mouth, lips, and over the hands. Jeghers [1] reported 10 cases in 1944 of the syndrome of generalized intestinal polyposis associated with melanin spots in these areas. The polyposis is distributed throughout the gastrointestinal tract, but the small intestine is predominantly involved. In each of these cases, the anatomic diagnosis was established by one or more operations for small bowel intussusception. The patients reported all had pigmented macules from 0.2 to 5 millimeters in diameter, dark brown to deep blue black in color. The buccal mucosa as well as the inside and outside of the lips, and the backs of the hands were involved. The spots were more numerous on the lower than on the upper lip and on the interior than on the outer aspect.

In ulcerative colitis, pigmentation of the face, body, and backs of the hands may take on the characteristics of pellagra. A yellowish discoloration of the skin is often seen in arteriosclerotic kidney, as well as in pernicious anemia.

PRURITIS

ITCHING, like pain, is a symptom which most frequently brings the patient to the physician. It may be the clue to an obscure or manifest disease, which if discovered and properly treated, may save a life or reduce suffering.

Itching is a subjective interpretation of a noxious stimulus applied to a cutaneous end organ. The stimulus may be peripheral or central. Its interpretation varies with the strength of the stimulus and the capacity to react to it. This capacity varies with individuals and, at times in the same individual. Itching may be elicited by vibrating or constant sub-threshold tactile stimulation. If the stimulus exceeds a certain threshold, the sensation of itching is replaced by pain. Scratching relieves itching by replacing it with pain. Presumably itching is simply a pain sensation of low intensity, it disappears whenever pain sensation is lost. Areas of anesthesia as a rule do not itch. It is assumed that tickle sensations and itching are conducted by peripheral neurones to the spinal cord, cross to the other side in the posterior commissure, run through the cord and medulla near the spino-thalamic tract, and are finally registered in the thalamus rather than in the cortex. Therefore, drugs which produce cortical depression, like morphine, paraldehyde, and bromides, do not influence itching as much as thalamic drugs like phenobarbital. Drugs which paralyze the sympathetic nervous system, like ergotamine tartrate, or stimulate the parasympathetic, like yohimbine, or muscarine, seem to inhibit itching. Thus sympathetic system plays a part in the genesis of pruritus.[9] Pruritus seems to be closely connected with dilatation of the smaller vessels and may be a response to changes in permeability. The psychogenic influences on itching indicate the importance of the sympathetic factors. Scratching as a prompt reflex reaction to itching is not fully developed before the age of one year.

A most important cutaneous manifestation of hypertension is pruritus. The blood vessels of the skin are affected by arteriosclerotic changes and thus influence the metabolism and nutrition of the nerve endings. The resultant itching is often severe and reflects in its intensity the ups and downs of the blood pres-

9. Koenigstein, H.: Zur Entstehung und Bekämpfung des Juckreizes Wien. Klin. Wchnschr., 1:815 (1936)

sure. Severe attacks of pruritus may precede cerebral hemorrhages, thus dramatically reflecting changes in blood pressure.

Every case of general itching, not obviously due to local inflammations or various kinds of skin diseases, must be subjected to painstaking investigations. Metabolic disorders, blood diseases, lymphoblastosis, gastrointestinal disturbances, nephritis, endocrine dysfunctions, focal infections, parasitic infestations, disturbing psychic influences, or allergies must be sought for.

In many of these conditions, severe pruritus may be the first symptom. For example, in diabetes the first indication of a metabolic disturbance may be local or general itching. The local varieties are chiefly perianal or vulvar, without any skin lesions in the beginning.

The lymphoblastomas form a large group of serious systemic diseases which are frequently heralded by severe itching. This group includes Hodgkin's Disease, mycosis fungoides, lymphosarcoma, and leukemia. Skin manifestations in leukemia, in the form of nodules, may be present for years before blood changes become evident.

PURPURA

Purpura is a hemorrhagic lesion due to a variety of causes, mostly internal. A petechia is a minute purpuric lesion. When caused by external agents, such lesions are usually the result of insect bites. Each case requires investigation to determine the cause. Toxic thrombocytopenic and non-thrombocytopenic purpuras are due to typhoid fever, measles, subacute bacterial endocarditis; or other infections; or to drugs, such as gold salts, sedatives, iodides, bromides, belladonna, bismuth and mercury. Some are due to allergies, blood and splenic disorders, and vitamin disturbances.

Henoch's purpura is of importance because its abdominal manifestations are sometimes confused with acute appendicitis. Heartburn, epigastric discomfort, abdominal colic, nausea and vomiting, melena, constipation, diarrhea, with bloody stools, and other symptoms of acute abdominal disease are usually present and have not infrequently led to a diagnosis of appendicitis or intussusception with subsequent laparotomy. Purpuric skin lesions in acute abdominal conditions, especially in children, should make the possibility of Henoch's purpura enter the physician's mind. Unfortunately, the purpura sometimes follows the abdominal symptoms by several days, which complicates the matter and explains the diagnostic errors.[10]

In subacute bacterial endocarditis the petechiae appear in crops and sometimes have pale yellow or necrotic centers. Those under the nail appear linear, as they are stretched to short lines by the growing nail, and are often called splinter hemorrhages.

31 Lincoln Park

DISCUSSION OF DR. FANBURG'S PAPER

Herman Kline, M.D. (Atlantic City): In this day of specialization without the benefit of a number of years of general practice, one loses sight of the fact that the body is a whole. The skin, being the largest organ in the body has functions just as important as those of any other organ. These functions and altered reactions are merely a reflection of the body as a whole.

Dr. Fanburg has covered this subject in a thorough and enlightening manner. All I can do is to emphasize a few points which I have found important in my practice.

Pruritus is no doubt the most common complaint that brings a patient to the attention of a dermatologist, either directly or by referral. It may be the prodromal symptom of a serious systemic disorder, as Dr. Fanburg pointed out. Certainly diabetes should be the first consideration. Yet many a patient has been seen, in which the simple procedure of testing the urine for sugar, was not done prior to referral.

To illustrate further the need for complete evaluation of a patient with pruritus, it was interesting

10. Wiener, K.: Skin Manifestations of Internal Disorders. C. V. Mosby Co., St. Louis, 1947, page 502.

to note a recent report by Aleshire on the successful cure of the delusion of parasitosis with antipellagrous treatment. She reported four cases of this delusion formation in which the typical triad of pellagra accompanied the disease. After adequate therapy for the pellagra the skin manifestations accompanying this delusion were completely cured. In view of the fact that heretofore this condition has been highly resistant to both dermatologic and psychiatric therapy, this becomes a most significant observation. Perhaps we should re-evaluate many of our cases of idiopathic pruritis on this nutritional basis.

We must also consider the possibility of internal involvement in other pruritic diseases, that have usually been classified as skin diseases *per se*, such as dermatitis herpetiformis, in which there may be associated abdominal tumors, either physiologic, (pregnancy) or pathologic masses.

Although Dr. Fanburg did not include the collagen diseases in his presentation, there have been some recent studies to indicate that localized scleroderma may be associated with cerebral changes. Altered electroencephalograms have been recorded in a few cases of localized scleroderma of the *coup de sabre* type.

In considering the purpuras, we must remember that cortisone has a specific action on the mast cells with the liberation of heparin and a lowering of the prothrombin time or prolongation of clotting time with resultant hemorrhages either internally or subcutaneously.

World's Richest Source of Vitamin C

A neglected backyard tree is about to give to the world its richest known source of vitamin C. After almost 10 years of efforts to interest the food industry in the potentialities of the fantastic acerola tree, the first commercial crop finally has been produced and is ready for the market.

The fruit is called Puerto Rican cherry, West Indian cherry or acerola. The tree grows in the Caribbean islands where, natives say, a tree in the back yard will "keep colds out of the front door."

A six-ounce glass contains 8650 milligrams of vitamin C—more than 85 times as much as a six ounce glass of fresh orange juice. It would take over 50 pounds of fresh raw cabbage to give the same amount of vitamin C as a glass of acerola juice.

The fruit is the size of an ordinary red cherry but is shaped like a crab apple.

The fruit's amazing vitamin value was first discovered in 1945 by Dr. Conrad F. Asenjo, while doing research on the vitamin content of Puerto Rican fruits. Tests showed him and his co-workers that "here was a fantastically rich, natural source of a health-promoting vitamin needed daily by everyone. It was available from a neglected, unappreciated backyard tree . . . Here—maybe—was a new and valuable cash crop for their little country, whose burden had ever been the worry of a one-crop economy, sugar cane."

Dr. Asenjo published his results. No one was interested until 1949 when Harvey Greenspan backed the planting of the first orchard, which produced its harvest this spring.

Multiple Sclerosis Patients

New Jersey physicians treating multiple sclerosis patients will be interested in the services offered locally by the National Multiple Sclerosis Society. These services are: (a) Manuals for home therapy; (b) provisions for recreational and social activities for patients; (c) instructions on auxiliary services for patients; and (d) acting as a clearing house for technical information and guidance.

All of these activities are under the direction of a medical advisory board of recognized specialists. There are two chapters in New Jersey; one is at 9 Clinton Street, Newark, and the other is at 724 Lawrence Road, Trenton.

A physician treating a multiple sclerosis patient is welcome to communicate with the local chapter at either of the above addresses.

S. L. Sloan, M.D.†
Paterson

The Myth of the Substitute Smoke

A confirmed cigarette smoker can never smoke a pipe or cigar safely because he must inhale. He will suck more smoke into his body than he did before. Dr. Sloan believed that the cigarette habitue must face the fact that he either give up all smoking or elect to lead a merrier, even if shorter life. Dr. Sloan died the day after this little paper was received.

Since the American Cancer Society's dramatic report concerning cigarettes and their possible relation to cancer of the lung, many have tried to change smoking habits. Pipes and cigars with no bad report against them, seemed the perfect answer. Unfortunately a cigarette smoker can not solve his problem in this simple manner.

Generally speaking, cigarette smokers inhale. For most, this is an integral part of a cigarette smoker's pleasure. Cigar and pipe smokers do *not* inhale. And therein lies the essential point: a smoker can change the *object* being smoked with relative ease. But it is practically impossible for him to change his *manner* of smoking. A cigarette smoker cannot smoke cigars or a pipe without doing himself great harm; nor can he derive any lasting pleasure from them.

Watch a cigar or pipe smoker. He is producing a large volume of smoke, inhaling none of it. He blows rings or releases the smoke immediately through his nose or in puffs through his mouth. Then watch a cigarette smoker. He is producing a much smaller volume of smoke but he is inhaling.

There are smokers who will tell you that they belong in neither of these two groups. They are not exclusively cigarette or pipe and cigar smokers. They smoke "everything," and, perhaps in any "given" quantity. In truth, this versatile man is primarily a cigarette smoker or, in his youth, *was* exclusively a cigarette smoker. Now he inhales everything he smokes.

Watch a cigarette smoker struggling with a cigar. The cigar produces a vast volume of smoke. But, as is his wont, he will try to inhale it, even if he chokes in the attempt. And he generally does! Similarly, but conversely, the cigar or pipe smoker chokes when he tries a cigarette. He is accustomed to retaining in his mouth a large volume of smoke and then expelling it gradually. So he takes a mighty puff on a tiny cigarette and nearly chokes in that process.

The American Cancer Society's report was delivered to the A.M.A. by three physicians. One read the report, the other two stood by. All three were virtuously puffing on cigars or pipes. Until recently they had been heavy cigarette smokers and were now doggedly trying to change their habits. I am afraid that they and their fellow cigarette puffers will gain nothing by this change for they will continue to follow their cigarette-type style of smoking, inhaling even larger quantities of smoke from their cigars and pipes. Thus, they will be in

†Deceased.

a worse position than before. A less simple but more effective solution to their worries is for them either (a) to cut down on the number of cigarettes smoked per day, (b) give up smoking altogether, or (c) to adopt the fatalistic philosophy of "A shorter life, perhaps, but a happier one."

In fine, there are two distinct types of smokers: a cigarette smoker who invariably inhales, and cigar and pipe smokers who never do. If a cigarette smoker changes to cigars or pipes, he will usually inhale and will derive little pleasure and suffer more harm. A cigarette smoker should either cut down or quit smoking. Or, in the alternative, he may smoke and live a shorter but, perhaps, happier life.

182 Belmont Avenue

Gynecologist Deplores Bosom Consciousness

The current wave of sex hysteria is bearing fruit in an increasing number of illegitimate births and a distressing problem of "bosom consciousness" among 'teen-agers, said Professor G. S. Schauffler, a Portland (Ore.) obstetrician and gynecologist, speaking before The Sixth American Congress of Obstetrics and Gynecology, on December 14, 1954. He said that illegitimate births in the 'teen-age bracket have doubled in the last 15 years.

"This depressing fact is certainly significant of the general trend in relation to precocious sex activity," Dr. Schauffler said. "There is a greatly increased awareness of sex in the younger group, stimulated and maintained by sex hysteria, which is a calculated instrument of modern journalism and entertainment trends.

"Beyond this, there are increasingly loose practices, bad examples and lack of supervision in home influences; liquor, narcotics, automobiles, auto courts; and finally the gang influences which combine these elements and tend, in certain groups, almost to enforce premarital sex practices."

He reported that anomalies of the breast in childhood and adolescence are seen often and added:

"These call for more attention from the physician in the present age because of accelerated sex trends contingent upon Hollywood influences and the emphasis by modern advertising and the press upon this semirespectable sex appendage. The array of bosoms now available to the naked eye is simply appalling."

Girls scarcely into adolescence already are subject to a bosom inferiority complex and are wearing miniature "falsies," Dr. Schauffler said.

"This is a rather peculiar modern intellectual distortion which cannot be dismissed easily," he added. "As physicians, we must under no circumstances disregard the psychic influence of such matters upon our youngsters. In my own practice, I have had one attempted suicide and several serious derangements contingent upon real or fancied breast irregularities.

"Premature development of the breasts is as a rule one of the less serious, but one of the more bothersome components of precocious sex development. There is little to be done about it unless some special underlying disorder can be corrected—some such conditions as cell tumor, pituitary disorder, and the like.

"Tardy development of the breasts, again, calls for attention as a component in some underlying syndrome. All vaunted treatments including sex hormones are unhelpful, except perhaps the business of putting on more fat. Estrogen may cause engorgement and this perhaps is temporarily helpful from a psychic point of view. Estrogen inunctions are worthless."

Donald A. Nickerson, M.D.
Boston, Mass.

Management of Fluid and Electrolyte Disturbances*

Dr. Nickerson tells what the pathologist can do to prevent the errors in electrolyte and water balance management which, in the opinion of many authorities, constitute the number one cause of preventable postoperative mortality.

The increasing interest in the problem of the recognition and the treatment of patients in water and electrolyte imbalance is one of the most stimulating challenges presented to physicians in the past decade. It is a problem which is best met by "team play," by the interchange of information between the surgeon, internist, pediatrician and others of the medical staff and the pathologist.

The expanding scope of surgical procedures is both a result of our current knowledge of the problems involved in electrolyte and water balance and a challenge to improve our knowledge and the application of this knowledge to the patient. It has been recently stated [1] that throughout the country, especially in hospitals that are *not* associated with medical teaching centers, errors of electrolyte management probably constitute the most important cause of preventable postoperative mortality. In internal medicine, the treatment of patients with cardiac disease by restricted salt diets, "rice" diets, the use and over-use of mercurial diuretics, and the use of exchange resins, all require control of electrolyte concentration in the patient. Diseases of the adrenal glands and the use of cortico-tropins also affect salt and water balance. The treatment of diabetic acidosis requires frequent electrolyte determinations. Renal failure either acute or chronic, also necessitates continuous laboratory data.

A special problem is presented in certain pediatric cases, as water balance is extremely important in children. A child loses twice as much water through the insensible route as does the adult. This is because he has a greater volume of surface area in proportion to body weight. The pediatrician deals with the problem of calculating water needs of the smallest premature infant as well as the largest adolescent child.

Through a wide range of clinical conditions, an understanding of the physiology of the body fluids and their clinical application is important. Yet it is easy to see why many physicians, feeling that they are over their depth in electrolyte physiology, are hesitant to delve into the subject. It should be emphasized that clinical judgment, careful physical examination and good clinical histories are as important as the proper correlation of laboratory data to manage effectively this type of patient. We should treat the patient and not the blood chemistry.

Measurements by the laboratory of the degree of water and electrolyte imbalance are not absolutely precise scientific procedures. Nor can the correction of the imbalance be reduced to simple formulae. Nevertheless, a plan *can*

*Read before the Section on Clinical Pathology, Annual Meeting of The Medical Society of New Jersey, May 17, 1954.

1. Chassin, J. L.: Post-operative Electrolyte Disturbances. Surg. Clinics of North America. 156:323 (April 1954)

be developed to anticipate many problems and to handle the other problems as they arise. Let me outline the role of the pathologist in such a plan.

The pathologist has an obligation to interest himself and others of the staff in this problem, to make available adequate laboratory services for the necessary determinations and to interpret the results. If he is in charge of the "solution room," he should have available the necessary "repair" solutions to aid in correcting the electrolyte imbalance of the patient.

IN SMALL hospitals the pathologist may be the only one prepared to bring the understanding of the problem to the medical staff. He will find this a stimulating and satisfying experience. By constant discussion, staff conferences and preparation of basic material in easily understandable form he can maintain the interest of the staff to the ultimate benefit of the patient.

The necessary equipment is available in almost all clinical laboratories today. A few years ago it was unusual to have flame photometers in clinical laboratories. Today, even smaller hospitals have such equipment. Thus, inability to perform sodium and potassium determinations is seldom a problem. The other necessary determinations are standard procedures requiring little expensive or unusual apparatus.

Patients having elective surgery that will not ordinarily require tube drainage of the intestinal tract who are not expected to have unusual losses of fluid, and who are not to be maintained on intravenous fluid therapy alone for more than several days will not require the degree of laboratory control that I will discuss later. This type of patient can readily be handled by administering 1000 to 3000 cubic centimeters of dextrose in water to satisfy the fluid requirements of the first twenty-four postoperative hours. Saline solutions are not necessary during this time as the alarm reaction incident to the operation will conserve enough sodium to maintain body needs. For the next several days, the requirements can readily be met by administration of 2000 to 2500 cubic centimeters of dextrose in water together with 500 to 1000 cubic centimeters of saline solution.

CHARTING

THE charting of an accurate twenty-four hour record of all intake and output is an essential feature of this problem. These data should be correlated on a standard sheet or form understood by all. It must be simple enough to be properly used by the nursing staff. We can best determine the needs of the patient by *accurate* knowledge of the actual figures involved.

It is extremely important that laboratory results be recorded in milliequivalents. The preparation of any graph, chart or gamblegram is dependent on this type of recording. It is the equivalent which takes into account the factors of atomic or molecular weight, valence of the electrolyte and the fact that plasma electrolytes are measured in milligrams rather than in Grams and finally that by this method we record the values in terms of their balancing ability (milliequivalents per liter).

Balance studies demand determinations of electrolyte loss on twenty-four hour specimens of the body fluids rather than on isolated random specimens obtained on blood or body fluids. We are not concerned about the level of the electrolytes in the intravascular compartment as we are about depletion or excessive concentration of electrolytes within the more important part of the body: the cell. Potassium is excreted in the urine in a rather constant fashion irrespective of the intracellular concentration due to some labile mechanism of its retention or resorption. The blood levels are thus maintained to the point of extreme intracellular depletion, therefore the circulating level is not an adequate index of the intracellular concentration. For this and other reasons, it is important that *all* body fluids be carefully collected in properly labeled jars and sent to the laboratory daily.

THIS procedure keeps one twenty-four hours behind the actual losses by the patient. But in

a properly organized program this is not serious. I have seen no patients harmed by such a procedure. Certainly it is a better method than attempting to estimate the degree of body loss of electrolytes by occasional random blood determinations or by isolated determinations on body fluids. The practice of performing a serum sodium on one day and a potassium on the next is as unsatisfactory as ordering a white count on one day and a differential smear on the next day while attempting to determine whether the patient should be operated upon for acute appendicitis. To reduce cost, we frequently pool all body losses into one large jug after the separate specimens reach the laboratory so that we can, by this method, do a single estimation of the total loss of electrolytes on the pooled specimens for each of the electrolytes with which we are concerned. This is not done the first day or two. Once we have determined the pattern of loss by the several routes we feel that, in the interest of economy, it is as satisfactory to do this procedure as to do determinations on the fluids lost by the several routes.

Daily recording of the weight of the patient is very important, but is not commonly carried out. It is not necessary to have elaborate mechanisms for doing this. One simple method is to place the patient on a chair which can be easily lifted on a platform scale without too much discomfort. Fluctuations of body weight are of greatest importance in our studies of water balance.

THE PLANNED ROUTINE

For the pathologist to function adequately as a member of this important team in caring for these patients, he should be notified early in those cases in which his advice may be required. It is easier to correct minor variations than major catastrophic ones.

The planned routine which I suggest is then employed primarily on surgical patients who are to undergo elective major surgical procedures which will require tube drainage for many days and will be maintained on intravenous fluid therapy for a prolonged period; for surgical patients with clinical evidence of major electrolyte imbalance as indicated by clinical findings and history; for patients admitted to the medical service in severe acidosis, alkalosis, adrenal insufficiency, serious renal disease; for patients with advanced cardiac disease who have been maintained on a prolonged diet deficient in salt having had mercurial diuretics with or without ammonium chloride, resins and other therapeutic procedures; for pediatric patients admitted in severe dehydration, severe acidosis, respiratory acidosis or alkalosis especially those secondary to drug, or chemical poisoning; for obstetrical patients in pre-eclampsia or eclampsia; and for certain patients falling into other categories. The procedures essential to evaluate the status of the patient when the laboratory is first called upon are as follows:

The first step is the evaluation of the blood electrolyte pattern. For this it is necessary to do the ten tests displayed in Table 1.

I have found these procedures (Table 1) satisfactory. Doubtless many pathologists have their own preferred tests and methods that can be substituted. The use of serum collected under oil for most of the tests makes for simplification and avoids the necessity of taking blood in different test tubes for different procedures which leads to confusion and some-

TABLE 1.

Test	Material	Method
Sodium	Serum under oil	Flame Photometer
Postassium	Serum under oil	Flame Photometer
Chloride	Serum under oil	Mercuric nitrate titration
Protein	Serum under oil	Biuret method, Howe, modified
Calcium	Serum under oil	Kramer & Tisdall
CO_2	Serum under oil	Manometric Van Slyke
pH	Serum under oil	Colorimetric
Eosinophile count		Method of Thorn or Randolph
N.P.N.		Koch-McMeekin
Hematocrit		Wintrobe; double oxalate

times the necessity of obtaining repeated specimens. The essential tests requiring serum collected under oil are the pH and CO_2 determinations. The values for these chemical tests are recorded in milliequivalents.

The eosinophile count is of value in estimating the probability of the alarm reaction and perhaps of its intensity. We are interested in this because of its effect on sodium and potassium equilibrium. To interpret this count properly, however, a pre-operative level must be available for comparison. Isolated counts without control are of little value owing to the wide normal variation. The non-protein nitrogen determination, or the urea nitrogen, is commonly used as an index of renal function and the degree of extrarenal azotemia. Blood creatinine determinations are of even greater value as blood creatinine is not elevated except when there is advanced renal parenchymal damage. The hematocrit reading is of value in following the degree of anemia and the state of hydration. I am not impressed with the clinical usefulness of studies of plasma volume or other tests for the volume of intravascular or interstitial fluid. It is my feeling that these determinations are better done with radioactive substances. This would require instruments not available to me or to most other average-sized community hospitals. A recent suggestion [2] that the use of Evans blue (T1824) using a much more dilute concentration than formerly employed may make it more practical to do serial determinations to estimate plasma volume than has heretofore been possible.

Calcium determinations should be made early in the care of these patients. It has been my experience that one forgets calcium determinations and forgets to administer calcium to patients on prolonged intravenous feedings or to those who have had multiple transfusions. The role of calcium in muscle irritability and contraction is well known. In many of the patients we are dealing with there is intestinal obstruction or paresis. Here maintenance of normal calcium blood levels is of considerable benefit. Another reason for these determinations is that the clinical manifestations of low calcium values are not apparent when there is a co-existent lowering of the potassium values. When the potassium concentration is suddenly restored to normal levels, there is frequently a clinical unmasking of the low calcium level with the sudden development of clinical symptoms of tetany. It should be necessary to repeat calcium values only two or three times a week.

Once these blood values are determined it should be necessary to repeat the sodium, potassium, chloride, CO_2 and pH determinations at least twice daily while the clinical and laboratory findings are abnormal. It can be readily arranged to do these procedures in the early morning and in the latter part of the afternoon so that the necessary fluids can be administered by the attending physician during his usual ward visits. By such scheduling of the administration of fluids the laboratory can also obtain samples of the blood after body equilibrium has been reached with the electrolytes administered.

The next step is to determine, if possible, the electrolyte and water loss by examination of urines and drainage fluids. For this purpose, the procedures listed in Table 2 are accomplished on urine specimens.

TABLE 2.

RECOMMENDED TESTS ON URINE
(24-HOUR SPECIMENS)

Test	Method
Volume	Graduated cylinder
Sodium	Flame photometer
Potassium	Flame photometer
Chloride	Mercuric nitrate titration
Glucose	Quantitative colorimetric
Specific gravity	Hydrometer
pH	Nitrazene paper

These values are also determined in milliequivalents per liter. I recommend that the total loss per electrolyte per 24-hour period be calculated and recorded on the clinical record. I suggest that the specific gravity and pH of the urine be carefully followed on each voided specimen or at specified times. Valuable data on the degree of hydration and amount of work

2. Plentl, A. A., and Gelfand, M. M.: A Modification of the Dye-dilution Method for Serial Estimation of Plasma Volume. Surg., Gynec. & Obst., 98:485 (1954)

required of the kidney can be obtained by following the specific gravity. The pH of the specimens will give us considerable information about the acid base balance. These procedures are carried out daily as required.

The essential procedures to be done on drainage fluids are listed in Table 3.

TABLE 3.

RECOMMENDED TESTS OF DRAINAGE FLUIDS (24-HOUR SPECIMENS)

Test	Method
Volume	Graduated cylinder
Sodium	Flame photometer
Potassium	Flame photometer
Chloride	Mercuric nitrate titration

The values for these electrolytes are handled in the same fashion as the urine values and recorded on the patient's chart in terms of total loss of each electrolyte per 24 hours. As I have indicated previously, once these determinations are done on the separate specimens, they can be subsequently carried out on pooled specimens in the interest of economy.

The physiologic water loss is based on the assumption of loss of insensible water of one liter per 24 hours plus 500 cubic centimeters of water for each degree of fever and an estimate of additional water loss if an unusual amount of sweating occurs.

After some experience with such a program one will find that in many patients whose condition is satisfactory and in whom the replacement of the electrolytes and water loss has been carried out adequately according to this plan, that the blood determinations first done twice daily will have to be repeated only once a day after the third or fourth day. Subsequently they need to be done to check only on those values which continue to be abnormal. However, in the critically ill patient, it may be necessary to repeat the procedures more frequently. After the blood values have been maintained at normal levels for one to two days, it should then be necessary only to continue to estimate the daily 24-hour loss of electrolytes and water in the urine and drainage material and to replace those electrolyte losses milliequivalent for milliequivalent and to adjust the water needs to cover the pathologic and physiologic loss without jeopardizing the patient. Occasional reviews can be made of the blood chemistry to insure the physician that the therapy is satisfactory.

The average patient admitted for a major surgical procedure who is in relatively good health before operation can be maintained on a program consisting of daily determinations of water and electrolyte loss through the urine and drainage routes as suggested above. By estimating physiologic water loss we can adequately replace these losses and carry the patient through one or two weeks of intravenous feedings alone without any significant derangement of the blood chemistries.

Patients on tube drainage, particularly nasogastric suction, may lose substantial amounts of electrolytes through the drainage tube if large quantities of water are used for irrigation or if the patient is allowed to drink unrestricted quantities of non-electrolyte-containing solutions. Such solutions stimulate the secretion of hydrochloric acid by the gastric mucosa and enhance the normal loss of electrolytes through this mechanism. Thought should be given to the possibility of using appropriate electrolyte-containing solutions for gastric irrigations. Possibly similar solutions can be equally well administered orally.

In acute renal failure, especially in "lower nephron nephrosis" the policy of administering large quantities of dextrose in water to "flush" the kidneys has been abandoned by most practitioners. There should be marked restriction of fluid intake, administering only the amount needed to cover the insensible loss and that small amount equal to urine output. Potassium should not be given in the early phase. Indeed, the serum potassium value is usually elevated. Very small amounts of saline may be given, depending on the amount excreted by the kidney. After the oliguric phase has passed, however, large quantities of water and electrolytes are necessary as the selective resorbative ability of the distal renal tubules

is impaired and very great amounts of sodium and potassium are present in the increased urine volume.

There is no better method of correcting these imbalances and establishing clinical well-being than by feeding the patient through the alimentary canal as soon as practicable. The body has infinitely greater wisdom in its absorption and utilization of electrolytes through this method; and the body tissues will utilize administered electrolytes only according to their needs.

REPAIR SOLUTIONS

THE next role to be played by the pathologist, particularly if he is in charge of the solution room, is to make available the necessary "repair solutions." If the patient has been followed according to the plan above suggested, it is relatively easy to calculate the amount of fluid and electrolyte to be administered to meet the body losses as determined and to correct for any significant deficit of the electrolytes. Two basic solutions are used: one a glucose in water, and the other electrolytes in water. To replace the ordinary physiologic losses, both solutions are used. To cover pathologic losses, solutions of electrolyte in water are given.

When confronted with a critically ill patient on whom previous studies are not available, therapy must begin on a less reliable basis. One should first, of course, do the required blood studies to determine the actual intravascular concentration of electrolytes. From such data therapy can be started with caution. One can estimate water loss by using previously published values for loss with regard to insensible loss, fever and hyperventilation. However, the method of determining loss by "percentage of weight lost" during the period of illness *prior* to admission is not valid and may be dangerous. Edelman[3] and his associates have demonstrated marked variation in the content of total body water with respect to both age and sex. The figures presented by Moore[3] indicate that the average 70 kilogram male has a lean body mass much greater than that of the average 57 kilogram female because of the greater amount of fat in the female. Water is not present in fat tissue but is predominantly found in lean body mass. These figures indicate therefore that the total body water of the average male is 43 kilograms whereas in the female it is only 29 kilograms, although the proportion of body water to lean body mass is identical in both. The intracellular water in the average male is 31.5 kilograms as contrasted to 20 kilograms in the average female. Similarly the interstitial fluid of the male represents 9.5 kilograms whereas that of the female is but 6.5 kilograms although the proportions are again identical.

If the average female lost the same amount of fluid as the average male, she would suffer a far greater loss of total body water and intercellular and interstitial water with a far greater concentrate of electrolytes. Similary the administration of equal volumes of "repair solution" would result in a far greater degree of dilution of electrolytes and expansion of the water content in all bodily compartments with perhaps disastrous elevation of intracellular water content in females.

Another method of estimating water loss in acute illness is to use the figures published by Butler.[4] He found that in a patient who had lost 10 per cent of body weight, the daily losses per kilogram of body weight are:

water: 100 cubic centimeters
sodium: 7 milliequivalents
chlorides: 6 milliequivalents
potassium: 7 milliequivalents

A diabetic who has had no insulin for 3 or 4 days, and who has been thirsting or vomiting for one day has a daily water loss at the rate of 100 cubic centimeters per kilogram. In milliequivalents per kilogram the daily loss would be 4 for chlorides, 5 for sodium and 6 for potassium.

From these suggestions one then may at-

3. Edelman, I. S., Haley, H. B., Schloerb, P. R., Sheldon, D. B., Friis-Hansen, B. J., Stoll, G., and Moore, F. D.: Further Observations on Total Body Water. Surg., Gynec., & Obst., 95:1 (1952)

4. Butler, A. M.: Diabetic Coma. New England J. Med., 243:648 (1950)

tempt to evaluate the deficit of water and electrolytes in such patients and for the first twenty-four hour period calculate, on an arbitrary basis, the amount and type of fluid to be administered. After that period, however, the procedure outlined above would be utilized and replacement would be based on the actual loss as determined. Added to this would be the amount necessary to cover the estimated deficit.

Many types of electrolyte fluids are available commercially. Each is designed to replace the loss in whole or in part. Some hospitals which prepare their own solutions also provide certain specialized solutions with a similar object in mind. It has been our experience, however, to use a few standard solutions from which one may select the appropriate solutions to replace the loss. These solutions are listed in Table 4. Although no HCO_3 is present in the solutions other than the 1.5 per cent sodium carbonate, the effective HCO_3 — that made available to cover the sodium released by the metabolism of lactate is given. If the patient has significant liver damage and is unable to metabolize lactate, sodium bicarbonate solution intravenously is to be preferred. Our potassium solutions are made up in 50 cubic centimeter ampules to allow for variation in dosage. I do not use more than one or two ampules in any liter flask and rarely give more than two ampules in any 12-hour period. In estimating "repair solutions," it should be remembered that patients who have significant loss through the gastric route lose sodium and chloride in the ratio of 3:4.

Such patients will develop hypochloremic alkalosis as the loss continues. In such instances, "repair solutions" should contain more chloride than sodium. Otherwise, the patient will be required to excrete the excess sodium primarily as sodium bicarbonate with a concomitant increased loss of body water required to carry out this increased amount of urinary solids. Such patients will exhibit the paradoxical picture of high urinary output while showing unusually large loss through the gastric route. It has also been postulated that with such patients this is not the only mechanism for the large urine volume since it may also be due to the fact that in such patients low potassium concentrations may exist. In at least some in-

TABLE 4.

PARENTERAL FLUID THERAPY — SOLUTIONS

Solution	Electrolytes (Milliequivalents per Liter) Na+	K+	Mg++	CL—	Eff. HCO_3	HPO_4	(Nutritional Value) (Grams per Liter) Protein	CHO	Calories
Glucose 5%	0	0	0	0	0	0	0	50	200
10%	0	0	0	0	0	0	0	100	400
Saline (0.85%)	146	0	0	146	0	0	0	0	0
(0.9%)	155	0	0	155	0	0	0	0	0
$NaHCO_3$	180	0	0	0	180	0	0	0	0
Na Lactate $\frac{\text{(Molar)}}{6}$	166	0	0	0	166	0	0	36	144
Hartmann's Solution NaCl 0.9% - 2 Na Lactate M/6 - 1	162	0	0	155	162	0	0	12	48
Darrow's Solution NaCl 3 gm., KCl 2 mg., Molar Na Lactate 40 cc. H_2O - 710 cc.	122	35	0	104	50	0	0	9	36
Potassium Ion Solution NaCl 0.6, KCl 1.0, Na Lactate 2.2, K_2HPO_4 0.3 in 50 cc. H_2O Add to 1 liter 10% glucose	30	20	0	24	0	3	0	109	436
Potassium Chloride KCl 3.0 gm. in 50 cc. H_2O Add to 1 liter 10% glucose	0	42	0	42	0	0	0	100	400

stances, low potassium concentrations produce a clinical syndrome representing the polyuria of pituitary disfunction. Conversely when the gastro-intestinal losses are primarily from small intestine, the patient will develop a hyperchloremic acidosis inasmuch as the ratio of sodium loss is 4:3. In such instances, the "repair solutions" must contain more sodium than chloride.

The routine use of solutions of amino acid and dextrose to maintain water and nitrogen balance in the postoperative period is open to re-evaluation. If the patient has a demonstrable eosinopenia considerable amounts of glucose must be given because the 11 and 11-17 oxysteroids will de-aminize much, if not all, of the amino acids which will be converted to glucose. Modest to moderate amounts of both sodium and chloride are present in solutions containing amino acids. It is suggested that possibly the use of blood plasma or whole blood transfusions may be a better method to maintain protein levels and nitrogen balance at least during the early postoperative period.

Solutions containing electrolytes should, if prepared in the hospital, be adequately labeled and indicate the actual concentration of electrolytes in each solution. This greatly facilitates and simplifies the adequate recording of such essential data on the clinical record.

Boston University School of Medicine

Commitment Papers: Get Them Right

Some embarrassment, and much time loss, develops when a physician sends a patient to a mental hospital with incomplete commitment papers. The number one error, curiously, is the failure to get the signature of the "applicant" or "petitioner." This is the person (usually a close relative) who applies for the commitment. The certifying doctor is *not* the applicant. The first few pages of the commitment paper blank are for the applicant. This is followed by two "medical certificates" which are for the physician. To be sure, it is not the doctor's job to see to it that the petitioner signs. But the applicant is usually distraught and depends on the doctor to advise him. If the physician just fills out the medical part and doesn't notice that the "petition" (first few pages) are unsigned, trouble develops. The patient is brought all the way out to the hospital and they have to refuse him because the petition (application) for commitment is not signed. This may entail a long and wasteful ambulance ride back home. It is such a simple thing — just glance briefly at the bottoms of all pages and see that wherever there is a signature line, there is a signature; and that wherever there is space for a notary public and an oath, that is filled in. (Exception: space for the Judge's signature. This constitutes the last few pages, and in emergency cases, may be unfilled because a patient, in an emergency, is acceptable without a Judge's order, provided the rest of the paper is correct.)

Doctors sometimes fail to see to it that the patient's name appears on the commitment paper—particularly within text paragraphs. Another common error is a stale date—or no date. A commitment paper is valueless if the older examination was made more than ten days ago. That's the law. So double-check those dates.

Robert A. Murphy, M.D.
Mount Holly

Resuscitation of the Newborn*

In the stage of anoxic flaccidity, a newborn will die unless enough pressure can be applied to expand the lungs. Safe pressures are ineffective. Ineffective pressures are unsafe. Dr. Murphy meets this dilemma by adhering to the principle that a live patient with ruptured alveoli is better than a corpse with intact alveoli. How to achieve this desideratum is spelled out in this short but practical article.

Anoxia in the newborn is capable of causing death, permanent physical disability or mental retardation. It does not really matter who assumes the responsibility for treating asphyxia neonatorum, (obstetrician, pediatrist, anesthesiologist, and so forth). It *is* important that whoever treats it understands his problem and renders effective treatment.

The causes of asphyxia neonatorum which can be prevented or treated are:

1. *Prematurity*: This is a near lethal condition. We have a clear obligation to avoid the addition of central respiratory depression to the prematurity. Avoid all sedative and anesthetic drugs. Avoid the hypotension which may accompany conduction anesthesia.

2. *Trauma*: The avoidance of cerebral trauma is largely the responsibility of the obstetrician and to a lesser extent of the delivery room nurses. We can all aid in educating the nurses.

3. *Drugs*: All analgesic, sedative and anesthetic drugs are capable of producing paralysis of the respiratory center. This possibility governs the choice and dose of such drugs. N-allyl normorphine is available for administration to the mother before delivery or to the baby after delivery when a known excess of morphine, Pantopon®, Meperidine,® Dilaudid® or Methadone® has been administered.[1] This drug is not effective against the depression caused by barbiturates, ether or cycloproprane.

4. *Premature clamping of the umbilical cord*: The blood volume of the newborn may vary from about 300 cubic centimeters (when the cord is clamped immediately on delivery) to about 330 if the cord is clamped upon cessation of its pulsations to about 360 or more cubic centimeters if the cord is clamped after separation of the placenta.[2] Early clamping of the cord may deprive the baby of 20 per cent or more of his normal blood volume. This is equivalent to bleeding an adult of a litre of blood—certainly not a practice to be advocated at a time of such stress as parturition is to an infant.

If efforts at prophylaxis prove inadequate, we are faced with the problem of treating asphyxia neonatorum. This is really an exercise in resuscitation. It differs from the resuscitation of the adult only by virtue of the decreased size, increased delicacy and peculiar characteristics of the patient. Always stress *gentleness* both as to the patient as a whole and as to each of his component parts!

The pertinent physiochemical changes are: (1) Reduction of arterial oxygen content from a normal of 10 to 1 volumes per cent. (2) Increase of arterial carbon dioxide tension from a normal of 32 to 65 millimeters of mer-

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*Read May 17, 1954 at the Annual Meeting of The Medical Society of New Jersey.

1. Eckenhoff, James E., *et al*: N-allyl Normorphine, Anesthesiology. 13:242 (May) 1952.

2. Windle, W. F.: *Asphyxia Neonatorum*, Charles G. Thomas, Springfield, Illinois, 1950.

cury. Carbon dioxide in such concentration is itself a narcotic and depressant drug. The inhalation of carbon-dioxide-enriched atmosphere is to be condemned. (3) Concomitant changes in the blood pH and lactic acid content.[3]

The pertinent and essential morbid anatomic change is atelectasis. To cure the atelectasis is to cure the disease. To fail to cure the atelectasis is to lose the patient. Oxygen will not help those patients unless it reaches expanded air sacs. The lungs must be expanded!

This is the point which I want to make—the purpose of this paper—*the lungs must expand*. If this entails risks, the risks must be accepted. Without expanded lungs, these babies will certainly die!

How then may we achieve expansion of these lungs and oxygenation of the anoxic medul'ary centers?

FIRST the airway must be cleared. This is accomplished by a 30 degree Trendelenburg position and gentle suction to the air passages. A 30 degree Trendelenburg position is enough. Any greater tilt of the patient increases the possibility of cerebral hemorrhage. Suspending a child from the ankles is nearly as bad as the old thumping and throwing. 30 degrees will do, with gentle suction.

Now given a baby with a clear airway and yet depressed, we must divide this disease into three degrees of severity and adjust our treatment accordingly.

A. *The stage of simple depression* is the most common. Here we have an infant with poor respirations and recurrent cyanosis, yet capable of being aroused. Treatment for this stage requires only gentle skin stimulation and/or oxygen enriched atmosphere.

B. *The stage of anoxic spasticity* is the next most common. Here we have an infant with irregular, gasping, infrequent respirations with marked cyanosis, but with reflex activity to pharyngeal stimulation. Treatment for this stage requires gentle skin stimulation and an oxygen enriched atmosphere. The first two stages are most common. Gentle skin stimulation and an oxygen enriched atmosphere are the only treatment required. The application of oxygen to the face under pressures of 10 to 20 centimeters of water will produce an oxygen enriched atmosphere and gentle skin stimulation.

C. *The stage of anoxic flaccidity* is the most rare and the most serious subdivision of asphyxia neonatorum. Here we have no respirations, marked cyanosis, complete muscular relaxation and total absence of reflex activity. The lungs of these patients will not expand of their own accord: they must be expanded.

How shall we cause them to expand? In my experience I have found three ways to expand these lungs.

1. Mouth-to-mouth breathing or mouth-to-endotracheal tube breathing.

2. Direct oxygen flow to mouth or direct oxygen flow to endotracheal tube by way of Ayer's "T" tube.

3. Mechanical resuscitator to mouth or mechanical resuscitator to endotracheal tube.

First let us consider the *endotracheal tube*. The tube is desirable only in the stage of flaccidity; but here it is most desirable. Pressure must be applied. If it is applied to the oral orifice the relaxed muscles of the mouth, tongue, pharynx and larynx will tend to fall (along with their supported structures) into the midline and hence cause or aggravate airway obstruction. The tube obviates this therapeutic complication as well as preventing overdistention of the stomach.

This is not to recommend the use of tubes by incompetent personnel. Such personnel will be using tubes in a faulty manner in simple depressions and will provoke traumatic complication. Given a competent diagnostician and a competent intubator, type (3) the flaccid stage, should always be intubated.

We now have a baby in the flaccid stage of anoxic depression preferably with an endotracheal tube in place. Our problem is to expand the lungs. This will require pressure—either positive or negative. Theoretically negative pressure is preferable. But I believe that the presently available negative pressure apparatuses are not practical in our day-by-day practice. Therefore, I will consider methods of positive pressure applied to the lungs.

This pressure may be applied by the resuscitator's mouth, by the pressure from a con-

3. Little, D. M., Jr., *et al.*: Asphyxia Neonatorum, Anesthesiology 13:518 (Sept.) 1952.

ventional oxygen tank set-up or by a mechanical resuscitator. Many workers [4] have shown that pressure of 20 centimeters of water are dangerous and capable of damaging the parenchyma of the lung.[5] Others [6] have shown that pressures of 20 (or more) centimeters of water are ineffective [7] in expanding the atelectatic lung of the newborn.[8]

Hence the dilemma. Safe pressures are ineffective; effective pressures are unsafe.

Therefore, we who treat these patients must assume a calculated risk. We must use an effective pressure. *We must accept a live patient with ruptured alveoli in preference to a dead patient with intact alveoli.*

I know of my own experience that dead men have persistent atelectasis. The pathologist has not yet found one of my patients whose cause of death was rupture of the lung.

We learn by experience how much to expand a chest, how rapidly to apply the pressure and how long to continue it.

For the manufacturers of resuscitators to take these figures and construct machines which will not deliver more than 16 or 20 centimeters of water pressure is to provide us with inadequate equipment. These pressures will not damage lungs. But they will, with equal certainty, never expand them. We can hardly be satisfied with intact unexpanded lungs: anything is preferable to this.

SUMMARY

1. This paper reviews, from a practical therapeutic standpoint, the problem of therapy in asphyxia neonatorum.

2. Asphyxia neonatorum occurs in three stages. The third or flaccid, stage requires positive pressure to overcome the basic anatomic change of atelectasis.

3. Pressures necessary to expand the atelectatic lung of the asphyxiated newborn must necessarily exceed pressures which are certain to be safe.

4. Murphy, D. P., and Bauer, J. T.: Lungs after Treatment of Asphyxia Neonatorum, Am. J. Dis. Child. 45:1196 (June) 1933.

5. Kreiselman, J., *et al*: Resuscitation of Asphyxiated Newborn Babies, Am. J. Obst. & Gynec. 15:552 (April) 1928.

6. Farber, S. and Wilson, J. L.: Atelectasis of Newborn, Am. J. Dis. Child. 46:572 (Sept.) 1933.

7. Smith C. A. and Chisholm, T. C.: Intrapulmonary Pressures in the Newborn, J. Pediat. 20:338 (March) 1942.

8. Wilson, R. A., *et al*: Initiation of Respiration in Asphyxia Neonatorum, Surg., Gynec. & Obst. 65:601 (Nov.) 1937.

The Burlington County Hospital

Is Polio Contagious?

Should poliomyelitis patients be treated at home? That depends on the danger of infecting other members of the family. Siegel and Greenberg [1] cite figures to show that the rate of multiple infections of household contacts was 40 times the rate of the general population. But Batson,[2] speaking of that danger, says flatly "this danger does not appear real. With over 200 home-treated patients, not a single instance of cross-infection has been reported." (Batson develops the same thesis to argue for the admission of polio patients to general wards, and for a belief in the conclusion that isolation of polio patients is unnecessary.) Stimson says drily that poliomyelitis is as contagious as measles.[3]

1. Siegel, M. and Greenberg, M.: Journal of the American Medical Association, 155:429 (1954)

2. Batson, R.: GP, 10:41 (1954)

3. Stimson, P. H.: Journal of Pediatrics, 44:607 (1954)

Your Medical Liability Insurance

Persistent requests for information relative to medical liability insurance have impressed your Committee on Medical Defense and Insurance with the fact that many members of our Society are not well informed about recent changes. Grave concern has been expressed as to the future of medical liability insurance. We want to present here as accurately as possible, the present status of liability insurance in New Jersey. Certain phases of this problem can best be understood if we review briefly the development of this type of insurance, with particular reference to its relationship to The Medical Society of New Jersey and the individual doctor-member.

Prior to 1922 The Medical Society of New Jersey maintained a "defense fund." This did not indemnify the doctor against losses but did defray expenses up to $250. In that year the Committee on Medical Defense and Insurance inaugurated a program under which The Medical Society of New Jersey secured a master policy from the United States Fidelity and Guaranty Company, under which it issued certificates of coverage to each member of the Society who desired it. In 1925 the New Jersey Department of Banking and Insurance ruled that this form of group insurance did not conform to the law. Since then doctors have been given medical liability insurance policies identified with the original coverage of The Medical Society of New Jersey. Since 1922 the firm of Faulhaber & Heard, Inc. of Newark have been the "official brokers" of our Society and have been instrumental in the negotiations affecting continuity of coverage. In the period from 1925 to 1952 your committee, through the close cooperation of Faulhaber & Heard and the United States Fidelity and Guaranty Company, developed an organization that is all-inclusive in scope with relation to statistical experience, policy changes, methods of procedure in medical defense, and investigation of claims. The data thus accumulated have enabled us intelligently to survey the competitive insurance market and to make our findings available to individual doctors or groups of doctors. Over this 30-year period we have maintained a file showing the number of suits, their costs and dispositions, and a complete "profit and loss" record. Throughout this period (1925 to 1952) our doctors received the benefit of low premiums as the result primarily of the favorable experience obtaining.

The first indication of an inflationary trend developed from 1945 to 1952, when your committee became conscious of a marked increase in claims and in monies paid out for losses. During this period, on a national level, insurance was adjudged to be "interstate commerce." Following this the United States Fidelity and Guaranty Company placed medical liability insurance under the jurisdiction of the National Bureau of Casualty Underwriters, whose membership represented most of the casualty insurance companies in this country. This brought about the adoption of a standard professional liability policy which could be negotiated by all members of the National Bureau. The function of this organization is to correlate the statistical data and to promulgate premium rates based on experiences in each geographical area.

During this transition period—(from approximately 1945 to 1952)—our losses underwent a marked inflationary trend. In 1952 a radical increase in premiums was formulated to offset the increased loss experience by our carriers. Your committee would emphasize that this experience was not confined to New Jersey. It was nationwide in scope. From the information on hand, it is uncertain as to whether the current premium rates will meet the cost for our necessary coverage.

To obtain full information, your committee surveyed this problem on a national basis. The picture is not bright. Group insurance — at one time popular—has been discontinued by all members of the National Bureau of Casualty Underwriters and coverage is now considered on an individual risk basis. Because of unfavorable experiences, the market for this type of insurance has become so limited that out of a possible 152 companies (members of the National Bureau) only two are regularly selling insurance in more than twenty states of the nation; and only twelve or fifteen occasionally write this form of protection. By reason of the support given by the members of the State Society to our insurance program, we are proud to say that there has been a con-

tinuity of coverage in New Jersey for the past thirty years. This is definitely *not* the experience in many other sections of the country. Nevertheless many members of our Society question the high premiums and the advisability of continuing their insurance with our present carriers. Some are seeking cheaper insurance elsewhere. Your committee is concerned with the economic problem presented, but wishes to repeat that the doctors of New Jersey are receiving liability coverage at a minimum cost commensurate with the current loss experience. Complete statistical data are confidentially available to individual doctors. The committee assures you that your interests are being safeguarded in every respect. The State Department of Banking and Insurance is a further safeguard. The function of this agency is to pass upon proposed policy changes and premium rates, and to assure the company of a reasonable benefit while guarding the policyholder against excessive premium rates. Your committee, in its concern for the welfare of the members of The Medical Society of New Jersey can recommend only that type of insurance that is demonstrably equitable and is protected by the full approval of the Banking and Insurance Department of New Jersey.

What factors have brought about the increase in claims which have in turn resulted in increased losses? During the past decade every field of medicine has been marked by the introduction of new drugs, new modalities, new technics and new appliances—each one of which carries with it certain inherent risks. The term "malpractice insurance," has long been outmoded. It implies inferior or bad practice. We must look upon our liability insurance as a protection. For example, a large proportion of our claims are due to medical and surgical accidents and alleged errors of judgment. Preventive measures involve the entire scope of medical practice. In general, individual, office, and hospital records must be complete and accurate. Every case must be viewed as a potential liability. Consultations are valuable as matters of record. Our physicians must always be conscious of our relationship (from a public relations standpoint) to the patient and to our fellow physicians. These conditions in a broad sense if adhered to would prevent many misunderstandings with their resultant claims.

The adage, "United we stand, divided we fall" applies strongly in the field of medical liability coverage. Your committee would be derelict if it did not express its conviction that there are distinct advantages to be gained under our present system of securing our medical liability insurance through a central agency (in our case, Faulhaber & Heard, Inc.), maintained as a medium of service to the medical profession throughout the state. Through this organization we have accumulated our complete data—evolved over a period of thirty years—relative to liability insurance in this state, both from a financial and a claim standpoint. At the present time, 90 per cent of our members are utilizing the services available under the organization effected by your Committee on Medical Defense and Insurance. It must be self-evident that a representative of a group of this size can better serve and more adequately protect the interests of the practitioner, than can a doctor who places his insurance through independent sources. We certainly do not wish to criticize individual agents selling medical liability insurance; but long experience has convinced us that in these times only through concentration and centralization of our efforts can adequate protection of the interests of our members be achieved.

In conclusion, your committee wishes to impress upon all members of The Medical Society of New Jersey that it stands at all times ready to serve them. With all of you, we have been deeply concerned about this insurance problem. We feel that you are adequately protected now. Future trends depend, to a great extent, upon each individual doctor's making himself fully aware of his responsibility to the public, to the patient, and to his fellow citizens.

J. Wallace Hurff, M.D., Chairman
James F. Gleason, M.D.
Benjamin F. Slobodien, M.D.
Peter J. Guthorn, M.D.
Rudolph C. Schretzmann, M.D.
John J. Flanagan, M.D.
Andrew C. Ruoff, M.D.

Apportionment of Surgical Benefits

For some time now a lively topic of interest among New Jersey physicians has been the suggestion that the available surgical benefits be apportioned so that the doctor who assists the operating surgeon would be entitled to receive from Blue Shield a fee commensurate with the services he has rendered. At the request of the Board of Trustees, the Medical-Surgical Plan polled all the members of the Society as to their reaction. Out of 3285 replies there were 2836 who approved, and 449 who disapproved. In other words, 63.6 per cent of the participating physicians replied, with 54.9 per cent approving of allocation and 8.7 per cent disapproving. In every county except Mercer more than half of the respondents approved of the allocation. In Mercer County, of the 196 who answered 100 disapproved. Further details are displayed in the following table.

The questionnaire was accompanied by the following letter:

Dear Doctor:

Attached to this letter you will find:

(1) Text of "Report of Reference Committee 'C' " as approved by the House of Delegates of The Medical Society of New Jersey in May 1954, relating to "Apportionment of Available Surgical Benefits."

(2) Text of a resolution on "Allocation of Total Payment by Blue Shield Plans," as adopted by the House of Delegates of the American Medical Association in June 1954.

The Board of Trustees of The Medical Society of New Jersey, at its meeting on September 26, 1954, referred the four points embodied in the reference committee report, as approved by the State Society's House of Delegates, to Medical-Surgical Plan "for implementation as rapidly as possible and in accordance with the resolution adopted by the A.M.A."

The Board of Trustees of Medical-Surgical Plan, on October 26, 1954 reviewed this request from the Board of Trustees of The Medical Society of New Jersey and voted to ascertain the views of the Plan's Participating Physicians who, of course, are directly affected.

May we therefore request that you complete and return the enclosed post-card reply. Your signature is not required, but it will be appreciated if you will indicate the county in which you practice.

A prompt reply will be most helpful and greatly appreciated.

County	Total Eligible	Total Participating	Total Reply	% of P.P.'s Reply	Approved	Disapproved
Atlantic	200	169	98	58.0	80	18
Bergen	666	480	322	67.1	298	24
Burlington	117	95	53	55.8	40	13
Camden	363	318	164	51.6	122	42
Cape May	55	47	29	61.7	27	2
Cumberland	92	82	55	67.1	52	3
Essex	1551	1283	843	65.7	763	80
Gloucester	87	71	48	67.6	44	4
Hudson	711	565	322	57.0	291	31
Hunterdon	47	40	28	70.0	25	3
Mercer	363	309	196	63.4	96	100
Middlesex	278	230	179	77.8	153	26
Monmouth	298	236	144	61.0	122	22
Morris	214	178	122	68.5	103	19
Ocean	64	51	38	74.5	35	3
Passaic	521	417	234	56.1	208	26
Salem	47	39	26	66.7	25	1
Somerset	100	79	50	63.3	48	2
Sussex	37	30	25	83.3	25	—
Union	580	413	283	68.5	258	25
Warren	44	37	23	62.3	18	5
	6435	5169	3285	63.6	2836	449

Included in the letter was a report of Reference Committee "C", 1954 House of Delegates, as follows:

Apportionment of Available Surgical Benefits

1. Any physician who assists in a medical, surgical, or obstetrical procedure is entitled to receive a fee commensurate with the services he renders.
2. The determination of eligibility of an assistant in a medical, surgical, or obstetrical procedure shall be the direct responsibility of the particular hospital service concerned.
3. It is the opinion of the committee that the fee schedule as listed by Medical-Surgical Plan for a surgical procedure is an all-inclusive fee, and does not represent solely the fee for the operative procedure alone. Therefore, the committee recommends that the total fee for the procedure be reapportioned, and that a new schedule of fees be established to provide payment for adequate and active pre- and post-operative care and for the technical assistance at the operative procedure itself as well as for the operative procedure. Nothing in the foregoing shall be interpreted to imply any change in the original fixation of responsibility of the attending surgeon for the care of the patient.
4. Each physician who participates actively in the care of a patient shall send his bill for services separately to Medical-Surgical Plan for payment.

Approved.

Also enclosed was a copy of the New Jersey Resolution to the 1954 meeting of the A.M.A. House of Delegates:

Allocation of Total Payment by Blue Shield Plans

WHEREAS, It has always been considered ethical practice for physicians to render separate bills to the patient in instances where such physicians have participated in any way in the treatment of the patient, on the basis of a just fee for such treatment, and for the patient in turn to pay each of the physicians separately; and

WHEREAS, The House of Delegates of the American Medical Association (December 1952) called attention to the fact "that separate bills must be rendered to the patient by consultants, assistants, anesthetists, and all other physicians;" and

WHEREAS, The Judicial Council of the American Medical Association in its report to the House of Delegates in December, 1952, stated that it "has held many times that when a surgeon renders a bill for his fee it should not include bills from colleagues who act as assistants or anesthetists, but these colleagues should render their own bills;" and

WHEREAS, Many patients are now insured by Blue Shield plans for payment for medical, surgical, and obstetric services of physicians; and

WHEREAS, These plans provide specified maximum payments for such services; and

WHEREAS, Physicians at times collaborate in rendering such services to patients enrolled in such plans; and

WHEREAS, It follows that it is equally proper for such physicians to render bills separately to a Blue Shield plan as it is to a private patient not covered by a plan; and

WHEREAS, The House of Delegates of The Medical Society of New Jersey on May 18, 1954, adopted the following statements of policy:

"1, 2, 3, and 4" (per preceding column)

WHEREAS, Such a procedure is not "the refunding of any portion of the total fee for the care of a patient" to any physician, as was disapproved by the Board of Regents of the American College of Surgeons on Dec. 7, 1953: therefore be it

RESOLVED, That the House of Delegates of the American Medical Association approve the principle that a Blue Shield plan make separate payments to eligible physicians who render services to an enrolled patient from the maximum scheduled payment available for such services, under the following circumstances: (1) That on certification of the operating surgeon, the scheduled amounts available for services rendered may be paid by the plan to a physician other than the operating surgeon provided that such other physician has properly rendered such services; (2) That each physician submit his individual report and charges to the plan according to the services rendered the patient; (3) That the plan make separate payment for the services of each physician; and (4) That the plan notify the patient of each payment made by the plan.

Adopted.

Don't You Be The Forgotten Man

If you fail to return the questionnaire for the 1955 Membership Directory, it will be impossible for us to give you an up-to-date listing. A few members ignore questionnaires or get them in late and then protest because of errors in the listing. Don't let this happen to you. Send that questionnaire in *now*! If you have misplaced it write to the Executive Offices for an extra copy of the questionnaire.

Letters to the Journal • • •

Dear Doctor,

I read with interest your editorial *With Their Boots On* in the January JOURNAL. While there is truth in your statements, it is not the whole truth.

The reason for the resistance of the A.M.A. to social security for M.D.s is that the majority of physicians do not retire at age 65. Yet there are more than a few who would like to retire if and when they can afford it. I put up a fight for our (the minority's) cause for social security to which the official stand of the A.M.A. did not object on an optional basis. For a while it seemed that this would be enacted into the law. In the last minute the committee which reported the bill decided that the "compulsory nature of the legislation shall be maintained" or nothing at all. So the medical profession was left without social security or any other advantages which might help provide for retirement which, do not let us forget, might not always be optional but often a necessity for physical reasons.

It may be true that out of 23,000 physicians over age 65, 19,000 are still in active practice. But this does not mean that all the 19,000 do so as a matter of preference. There is a good number who, partly disabled or not but without personal security are compelled to drag their tired limbs on and on out of sheer necessity to survive. Social security, though not a complete solution, could be a help toward desired retirement.

The vocation of a physician when ideally practiced, is indeed one of the noblest. Unfortunately it is not always ideal in practice. The frailties and imperfections of human nature and society, the thousands of disappointments because of these and our own limited powers, make the practice of medicine anything but a bower of roses, even at the price of our best endeavors. How often do we have to strike a compromise against our better inner judgment for the sake of expediency? There comes a time when we get tired of these, tired mentally and physically and long to rest peacefully away from the turmoil, also as a matter of mere self-preservation. Is it not true that the life expectancy and morbidity of our profession is less favorable than others, except perhaps the still harder pressed business executives? Still the majority never thinks of retiring. Perhaps it would not be so bad for some of us if there would be a "supervisor" to tell us when to retire.

Finally there is another aspect which might not appear complimentary for the mental and spiritual attitude of the profession. I hope that I shall not be ostracized for making the bold statement that the reason why many or most physicians do not retire, is that they have a very unimaginative mind. Nothing else exists for them except medicine, the holy.

Time and again when I express my desire to retire at or near age 65, I hear first the absurd statement that "you know, once you retire you go down hill very fast." Then comes the question "what are you going to do with all your time once you quit practicing?" First I felt sore hearing this as impugning my mental ability and imagination. Now I consider it as a direct reflection on the poor mentality and unimaginativeness of the questioner himself. It is true that medicine is an absorbing profession. It is unlike any other because there is no limit to the time a physician can spend studying it. However, when it becomes exclusive of all other human interests it runs against sound psychologic and professional judgment. We are humans first and physicians second. He who neglects the interests of a human cannot be an accomplished physician. It is regrettable that during active practice we have so little time for other interests: nature, home, community, travel, sports, arts, literature, science (other than medicine) and pleasurable hobbies. Is it then difficult to understand that some of us with a measure of imaginativeness desire to retire while there is still time left to turn to these heretofore neglected human interests and enjoy with them a free, easy and unfettered life?

Paraphrasing your verbal play, for my part, just because I still might be rambling in anecdotage or sparkling with wit and keeness, I do *not* want to keep plugging until an early day I die. With my boots on. And perhaps, I hope, that's not the way *all* really want it.

Very sincerely yours,

F. R. PALMER, M.D.

Announcements • • •

Medical Radio Broadcasts

Physicians of New Jersey are asked to remind their patients of the radio broadcasts on Wednesday evenings at 8:00 p.m. over FM station WSOU. These are given by the staff of St. Michael's Hospital in Newark. The schedule began on February 23. Subsequent broadcasts are:

March 9—Tuberculosis, Rowland D. Goodman, M.D.

March 16—The Allergies, Lewis F. Brown, M.D.

March 23—Rheumatic Fever, John H. Donnelly, M.D.

March 30—Coronary Heart Disease, Ralph Miller, M.D.

April 6—Surgery on the Human Heart, Anthony D. Crecca, M.D.

April 13—The Ulcer Problem, Harry B. McCluskey, M.D.

April 20—Cancer of the Stomach, Louis E. Zimmer, M.D.

April 27—Diabetes Mellitus, Otto Brandman, M.D.

May 4—Surgery of Today, Albert Sasso, M.D.

May 11—The Role of Psychiatry in Modern Medicine, John G. Novak, M.D.

May 18—The Physician and His Place in Society, Harrold A. Murray, M.D.

Trudeau School of Tuberculosis

The forty-first session of the Trudeau School of Tuberculosis will begin June 1st, and continue to June 29th. The course will cover all aspects of pulmonary tuberculosis and other chronic chest diseases.

Tuition is $100, payable to the Trudeau School before the opening date, June 1, 1955.

The Trudeau School of Tuberculosis is approved for training of veterans. Any applicant desiring to obtain veteran's benefits should clear his registration with the Veterans Administration.

Applications and more detailed information may be obtained from P. O. Box 200, Trudeau, N. Y.

Dean Named for New Medical School

Dr. Charles L. Brown, currently dean of the Hahnemann Medical College in Philadelphia, has been named as the dean of the newly established Seton Hall College of Medicine. Dr. Brown will remain dean of Hahnemann until July 1, 1955, at which time he will assume his duties at Seton Hall.

Dr. Brown has been in the field of medical pedagogy since 1923 when he became an Instructor in Pathology at Harvard. He became Associate Professor of Medicine at the University of Michigan in 1928 and seven years later was named head of the Department of Medicine at Temple University Medical School in Philadelphia. In 1946 he was appointed dean of the medical school at Hahnemann.

He is a past president of the Philadelphia County Medical Society, the laureate of the Strittmatter Award, and the Chief Consultant in Internal Medicine of the Veterans Administration in Washington. Dr. Brown is a member of the editorial board of J. B. Lippincott, the well-known medical publishers.

Venereal Disease Control Seminar

A Venereal Disease Control Seminar will be held on March 23 and 24, 1955, at Chalfonte-Haddon Hall, Atlantic City. Topics to be discussed will be of interest to practicing physicians. There is no fee for registration or attendance.

Do You Pilot a Plane?

If so, here's a chance to get in on the ground floor of an about-to-be-born Physicians Pilots Association. Airmail your inquiry now to Dr. H. B. Vickers, 25 Jackson Street, Little Falls (Herkimer County) New York.* Indicate in your initial letter the kind of plane you can fly and the field where you land.

*That's Little Falls, *New York*, and not the one in New Jersey.

Medical and Neurological Staff Positions Available

Several vacancies are available for the posts of clinical assistant and assistant visiting physician at the medical and neurological services of the Goldwater Memorial Hospital in Welfare Island. If interested, write to Dr. Benjamin Jablons, Goldwater Memorial Hospital, Welfare Island, New York 17, N. Y.

New Jersey Surgeons Meeting

The New Jersey Chapter of the American College of Surgeons is holding a clinical session in Paterson on Saturday, March 26. All aspects of surgery will be presented. All the surgical specialties will be represented on the program. The $5.00 registration fee includes luncheon and dinner. For full program and registration write to Dr. Frank B. Brogan, 600 Broadway, Paterson 4, N. J.

A.C.S. Fellowships

Many important fields of clinical and epidemiologic research require that the investigator have a knowledge of statistical methods as applied to the design of experiments and the analysis of data. To encourage training along these lines the American Cancer Society is offering scholarships supported by grants. Candidates will be favored who express intentions of following a career in a discipline applicable to the study of growth, to the study of the epidemiology of cancer and other chronic diseases, or to a clinical research in cancer.

For a predoctoral fellowship, applicants must possess a baccalaureate degree and have knowledge of biology, chemistry, mathematics and physics. The fellowships are awarded for a period of three years. Stipends will be $2000 per year.

For the postdoctoral fellowships, the candidates must be citizens of the United States who possess the degree of M.D., D. Sc. or Ph.D. Fellowships are for one year but may be renewed. Stipends will range from $3000 to $4500.

For further information write to Professor E. Cuyler Hammond, 30 Hillhouse Avenue, Yale University, New Haven.

Special Pediatric Meeting

On March 23, the New Jersey Chapter of the American Academy of Pediatrics will focus on accidental injuries in children. The program begins at 3:00 p.m. at the Academy of Medicine, 91 Lincoln Park, Newark. The speakers are Dr. M. J. Rodman, Associate Professor of Pharmacology at Rutgers, who will talk on household poisons; Dr. George Wheatley, Vice-President of the Metropolitan Life Insurance Company, who will discuss accident prevention; and Dr. William Langford, Professor of Child Psychiatry at Columbia University, who will present a paper on accident-proneness. There is no registration, and all physicians are welcome to attend.

Automatic Blood Counter Literature Available

A catalog describing the new automatic blood counting device is now available. A copy may be obtained gratis. Write to Mr. Richard Ashley, Jarrell-Ash Company, 26 Farwell Street, Newtonville, Mass. Ask for Catalog A-12-54.

Course in Parasitic Disease

A short intensive course on the laboratory diagnosis and pathology of parasitic infections will be presented August 15 to 27 at the Louisiana State University in New Orleans.

The course will include lectures, demonstrations, films and supervised individual laboratory study. Emphasis will be placed upon the practical aspects of laboratory diagnosis of common parasitic infections, including training in stool examination. Abundant material from patients with parasitic diseases endemic in this area will be available. Comprehensive slide sets containing parasitic organisms in tissue sections will be studied. The building is air conditioned.

Registrants should bring microscopes, equipped with mechanical stages, and their microscope lamps. A limited number of places will be available. Fee for the course is $50.

Persons interested in attending, write to:

Dr. Clyde Swartzwelder
Department of Microbiology
Louisiana State University School of Medicine
1542 Tulane Avenue
New Orleans 12, Louisiana

Three Day Fracture Course

An intensive course in the treatment of fractures will be given in Philadelphia by the Doctors L. and J. Bohler of Vienna, Austria, supplemented by discussions by distinguished local traumatic surgeons. Registration fee is $50. The course will be held 9:00 a.m. to 5:00 p.m., April 21, 22, 23. For registration and full program write to Dr. William T. Fitts, Jr., 301 South 21 Street, Philadelphia 3.

Psychiatric Residencies Available

Fully accredited residencies in psychiatry are available at the Veterans Administration Hospital, Lyons, N. J. For further details write to Manager, VA Hospital, Lyons, N. J.

Proctology Meeting: March 23

Proctology in general practice will be the theme of the next meeting of the International Academy of Proctology, March 23 to 26 at the Hotel Plaza in New York City. A parallel session will be held at the Jersey City Medical Center on March 24. For further details, write to Dr. Earl Halligan, Surgeon-in-Chief, Medical Center, Jersey City.

Physical Medicine Congress

The next scientific session of the American Congress of Physical Medicine and Rehabilitation has been scheduled for the week of August 28, 1955 at the Hotel Statler in Detroit. For full program write to the American Congress of Physical Medicine and Rehabilitation at 30 North Michigan Avenue, Chicago 2, Ill.

Memo to Women Physicians

The New Jersey Medical Women's Association is sponsoring an open meeting on the constructive uses of atomic energy, at the Academy of Medicine, 91 Lincoln Park, Newark, on Sunday, March 27, (1955) at 2:15 p.m.

The speaker, Brigadier General De Coursey of the U. S. Army, is an outstanding authority in atomic research. He was a member of the Joint Committee for the Study of the Effects of the Atom Bomb in Japan in 1945, and of the Naval Radiologic Safety Section, Operation Crossroads (Bikini). He has been Director of the Armed Forces Institute of Pathology.

You, your family and your friends are cordially invited to attend.

Metabolism Section

The members of the Metabolism Section of The Medical Society of New Jersey are having a luncheon on April 20, 1955 (noon) following the meeting of the Section on Metabolism at the Ambassador Hotel in Atlantic City. If interested in attending, please communicate with Dr. James F. Gleason, 7 South Oxford Avenue, Ventnor, N. J., inclosing a check for $4.03.

Calling "Long Island" Alumni

Alumni Day at State University Medical in Brooklyn (Long Island Medical School to most of us) will be Saturday, April 30. The program is interesting and varied . . . for details write to the executive secretary of the Alumni Association at 350 Henry St., Brooklyn 1, New York.

Authors' Clinic • • •

The Rising Tide of Trade Names

Did you ever get a lawyer letter because you used a propietary drug name without capitalizing it? It has happened to us and probably to every medical editor. For instance, Parke, Davis own the word "Adrenalin" and Wisconsin Alumni Research Foundation own the word "Dicumarol," Smith, Kline and French own "Benzedrine" and so on. Now suppose you write, in your article, "the emergency tray should include supplies of adrenalin, benzedrine and dicumarol . . ." If they wanted to (they probably don't) Parke, Davis could write you a letter charging you with using their registered trade-name as a common noun. And so could the other organizations.

Their position is not as silly as it sounds. Here is a company that spends millions of dollars, hundreds of months, thousands of manpower-hours sweating out a new drug. They give it a proprietary name—perhaps they call it Shnookiesillin—and sit back to reap the rewards of their toil. Shnookiesillin has the remarkable property, let's say, of relieving pain, cheering a depressed patient and growing hair at the same time. So long as you use a capital "S" in writing of it, you put people on notice that this is a proprietary trade-name like Ledercillin rather than a common noun like penicillin. So any one who wants to use Shnookiesillin has to buy their brand of it, since only their brand may be called Shnookiesillin. But if you start spelling it with a small "s" (we editors call that a "lower case" s)—if you use a lower case letter, then the word becomes common currency. Take "corn flakes" for instance. Once that was a proprietary, now it is in the "public domain." Whatever money the manufacturer spent to build up good will for "corn flakes" is now lost. Anybody and his brother can make corn flakes.

That's what happened to Aspirin. Once it meant Bayer. They owned the word. But it was often spelled with a lower case "a." It finally entered the dictionary and became a common noun. Whatever money the Bayer company spent on building up good will for Aspirin has helped to reap profits for all the Bayer competitors who use the word too.

The word "Dictaphone" is a proprietary word, as is "Carborundum," "Pyrex," "Frigidaire," "Mimeograph" and even "Vaseline." If the Chesebrough Manufacturing Company let you speak of "vaseline gauze" you'd get to think that any kind of petroleum jelly is "Vaseline," and they'd be wasting all their advertising investment promoting "Vaseline." So they, properly, want you to use a capital "V."

If the drug name is in the public domain (atropine or morphine for instance) you may spell it with a lower case initial and you need not refer to any manufacturer unless you want to give credit to a supplier. But if it is *not* in the public domain—that is, if the name is "owned" by a company, then you mst indicate that the word is thus "protected." You do that in one of three ways:

1. *By encirculing an "R" after and above the word, like:*

"Benadryl® has been found effective in . . ."

(On the typewriter just roll back the carriage half a space and type an R after the name.)

2. *By indicating the name of the company immediately after mentioning the drug:*

"Patients who had been taking Benzedrine (Smith, Kline and French) were found to be . . ."

3. *By citing to a footnote and mentioning the company in the footnote, so:*

" . . . Patient who had received Sodium Amytal[3] intravenously were . . . "

Of course you have another option. You can just mention the chemical name of the drug and forget the proprietary name. At one time that was easy to do. You could say "acetyl salicylic acid" instead of "Aspirin." It was as easy to write "ergotamine" as "Gynergin," or to say "amphetamine" or "epinephrine" rather than use the proprietaries "Benzedrine" or "Adrenalin."

But those days are gone, possibly forever. Today the chemical names are so complex that you just can't use them. For instance, the word Dicumarol® is used a good deal in medical writing. If you want to avoid the capital letter, the circled R, and the long-winded reference to the Wisconsin Alumi Research Foun-

3. Amytal is the registered trade-name of Eli Lilly and Company's brand of amyl ethyl barbituric acid.

dation, you might try using the chemical name instead: three, three, methylene, bis, four-hydroxy-coumarin. But frankly, no author is going to write that jaw-breaker very often, and no reader is going to plow through a paragraph where that appears several times. Most of the modern pharmaceuticals are like that. If you don't want to say Allonal ("Hoffmann-LaRoche") you *could* say allyl isopropyl barbiturate—but would any doctor learn anything from your paper? Suppose you want your colleagues to use Dilantin® in epilepsy. If you urged them to prescribe sodium diphenyl hydantoin, most of them would not know what you meant. So, as a practical matter you have to use these proprietary names.

Remember though, that lots of drugs are in the public domain—and there you don't need capital letters, circled Rs or footnotes to a company. You can't tell by the sound whether the name is "protected" (proprietary) or "open" (in the public domain). For instance, picrotoxin sounds like a proprietary, but it isn't. A lower case "p" is all right. On the other hand, Novocaine® sounds like a common name but actually it is the Winthrop brand-name for procaine. Riboflavin is in the public domain but Pentothal® (Abbott) is a trade-name. In a cardiac emergency you might call for Cedilanid without shouting "Sandoz" . . . but when you write about it, put that "R" after Cedilanid®, unless you want to call it " a certain crystalline lanatoside C of constant potency"—which would be silly.

When you write an article, do a double-check on these drug names. Ask a pharmacist whether the name is a proprietary word (like Seconal®) or a public domain word (like sulfathiazole). Or check it through a manual such as the *Physicians' Desk Reference* ("Medical Economics, Inc.") or the *Modern Drug Encyclopedia* (Drug Publications, Inc., New York). If you don't do it, the editor will have to scrutinize every drug name you use, insert or remove the Rs, or spell out long chemical names. And *that* is no way to treat an editor. Not if you want your article published.

HENRY A. DAVIDSON, M.D., Editor
The JOURNAL

Obituaries • • •

DR. ARTHUR J. ELLIS

Dr. Arthur J. Ellis, a psychosomatic specialist in Newark and Glen Ridge, died on January 26, 1955. Born in Rutland, Vermont in 1889, Dr. Ellis received his M.D. degree from the University of Vermont in 1914. He served in the medical corps of World War I and immediately thereafter opened an office for the general practice of medicine in Newark. He became increasingly interested in psychiatry and after graduate study in the field he limited his practice to psychosomatics. He was a participating physician in the out-patient program of the Veterans Administration and was connected with the staffs of Presbyterian and Beth Israel Hospitals.

DR. JOSEPH E. L. IMBLEAU

One of the medical leaders of Union County, Dr. Joseph E. L. Imbleau, died on January 14, 1955 while visiting a patient at the Overlook Hospital in Summit. Born in Canada in 1898 Dr. Imbleau received his M.D. degree from McGill University in 1922. After interning and taking residencies in New York City he came to Union Township in 1924. A year later he became township physician and subsequently was named police surgeon and school physician. At the age of 45 he applied for and received a commission in the U. S. Navy and served overseas for almost three years.

Dr. Imbleau was active in civic affairs, a member of the Board of Health and identified with staffs of St. Elizabeth Hospital in Elizabeth, Beth Israel Hospital in Newark and Overlook Hospital in Summit. He was also a Fellow of the American College of Surgeons.

DR. H. ROY VAN NESS

One of Essex County's most cheery medical voices was stilled on the first day of 1955 with the death on that date of Dr. H. Roy Van Ness. A life-long resident of Newark, Dr. Van Ness was graduated from the Jefferson Medical College in 1912. He entered private practice in his native city and became interested in surgery. In addition to a large and varied private practice, Dr. Van Ness served several hospitals, eventually becoming chief of a surgical service at the Martland Medical Center (then the Newark City Hospital) and senior surgeon at the Clara Maass (then the Lutheran) Memorial Hospital.

Dr. Van Ness was also active in medical-civic affairs. He was on the advisory board of the Essex County Hospital at Belleville and for many years was the nominating committee delegate to the state society from its largest county component. He served the Essex County Medical Society in many capacities, and in 1937 became president of that society. He was active in developing the medical consultants' program for the induction board during the early days of World War II.

County Society Reports • • •

Hunterdon

In the absence of the president, Dr. Ray E. Trussell, president-elect, presided at the regular meeting of the *Hunterdon County Medical Society*, January 25 at the Union Hotel, Flemington.

Dr. Arno W. Macholdt, High Bridge, was elected to membership.

Dr. Trussell announced his resignation as Director of the Hunterdon Medical Center effective July 1, 1955, to become Administrator of the School of Public Health at Columbia University's College of Physicians and Surgeons in New York.

Letters were read presenting candidates for nominations for Second Vice-President of The Medical Society of New Jersey at the Annual Meeting in 1955 as follows:

From Camden County—Dr. Reuben L. Sharp
From Bergen County—Dr. Luke A. Mulligan
From Essex County—Dr. Kenneth E. Gardner

A request from Mercer County to participate in a discussion with other county representatives on the subject of fee-splitting was respectfully declined by Hunterdon County because we do not have any fee-splitting problem here. The members felt that the various judicial bodies of the State and County Societies are the proper forums for fee-splitting problems.

A joint committee representing the Hunterdon County Medical Society and the staff of the Hunterdon Medical Center was authorized to develop a "question and answer" column in local papers.

Mrs. Helen Roever, Chairman of the Education Section of the Hunterdon chapter of the American Cancer Society, presented a film on surgical technics in cancer control.

JOHN B. FUHRMANN, M.D.
Reporter

Middlesex

The regular monthly meeting of the *Middlesex County Medical Society* was held at the Roosevelt Hospital, Metuchen, on January 19 with the president, Dr. Malcolm M. Dunham, presiding. The minutes of the December meeting were read and approved.

The Judicial Medical Ethics Committee proposed Dr. Irving Zuckerberg of Avenel for regular membership by transfer from the Union County Medical Society. Dr. Zuckerberg was elected.

Dr. Charles H. Calvin, Chairman of the Program Committee, presented the speaker of the evening, Dr. William O. Wuester, Attending Surgeon at the Elizabeth General Hospital; Director of the James S. Green Memorial Tumor Clinic and Consultant in Oncology for the Alexian Brothers Hospital. Dr. Wuester gave a talk on the surgical and radiologic aspects of skin cancer. A discussion period followed.

An announcement was made that insurance companies were cooperating in the new fee schedule for compensation cases. A motion was passed to appoint a committee to supervise the new fee schedule in compensation cases.

Dr. Eugene J. Tyrrell was elected as delegate and Dr. A. K. Niemiera as alternate to the House of Delegates of The Medical Society of New Jersey.

A motion was passed to obtain a room in Atlantic City in April for the use of the members of the Middlesex County Medical Society during the Annual Meeting of The Medical Society of New Jersey.

The qualifying criteria for the recognition of consultants, as adopted by The Medical Society of New Jersey Board of Trustees, were accepted by the Middlesex County Medical Society.

A "Chain of Command" was set up in the event of an area disaster—A specified list of physicians and nurses would be notified immediately in an indicated order. The first one reached will assume command of the entire medical, health and welfare division, and will continue to function in that capacity during the emergency or until a doctor nearer the top of the list arrives at the medical liaison office.

IVAN B. SMITH, M.D.
Reporter

Morris

The regular January meeting of the *Morris County Medical Society* took place at the Spring Brook Country Club on January 20. Members of the Morris-Somerset Pharmaceutical Association were guests. One hundred thirty-five people were present.

Vice-President of the Medical Society, Dr. Harold Hatch, presided. He introduced Dr. Bernard MacMahon and Dr. Lawrence Collins, each of whom have been members of the Morris County Medical Society for over 35 years and are now honorary members. A desk set was presented to each.

Mr. William Richardson, president of the Pharmaceutical Association, introduced Mr. Adolph Palumbo, who after thirty years membership in the association was made a life member.

After the steak dinner the program chairman introduced "The Tuckers" a team of "mentalists" who proceeded to astound, confuse and entertain the audience for the next hour; the meeting thereupon being closed.

ALBERT ABRAHAM, M.D.
Reporter

Passaic

The regular monthly meeting of the *Passaic County Medical Society* was held on December 14, 1954 at the Medical Society Building. Dr. Thron, the president, presided.

In the absence of the secretary, Resolutions on the death of Drs. John J. Ritter and Maurice M. Chapnick were read by Dr. Thron. These were approved as read.

A communication from the Board of Health of the Borough of Totowa was read. It contained a request that the members of the Society report immediately to the Clerk of the Board of Health any cases of poliomyelitis which they may learn of in that borough. This was further referred for *Bulletin* announcement.

The speaker, Perry Hudson, M.D., was then introduced. Dr. Hudson, Director of Urology, Francis Delafield Hospital, New York City, spoke on "Tumors of the Genito Urinary Tract." A question period followed.

The meeting was addressed by Dr. J. R. Jehl, who explained the benefits that would be derived by the families of doctors who joined the Society for the Relief of Widows and Orphans of Medical Men in New Jersey. Dr. Jehl urged all to participate.

A proposed change in the By-Laws was read by Dr. Sandor A. Levinsohn and he stated that a copy would be sent to the members voting at the next regular meeting. This was in connection with Article VII "Funds and Expenses."

An attractive setting in keeping with the Holiday decorations was arranged by Mrs. S. H. Pink, an Auxiliary Member, in serving the evening's collation.

DAVID B. LEVINE, M.D.
Reporter

Salem

The regular meeting of the *Salem County Medical Society* was held December 17, 1954 at 4:30 p.m., and was opened by the president, Dr. C. B. Norton.

Dr. Samuel Rynes of Philadelphia, discussed "Allergy and Allergic Diseases." Dr. Rynes discussed his subject under diagnosis, etiology, and treatment. He listed most allergic problems as falling under one of three headings, asthma, skin allergies, and nasal allergies or headache.

Dr. Norton called the business meeting to order at 5:40 p.m. Dr. Suter spoke on our local public relations program, which seems to be satisfactory. It was agreed to have Dr. Suter's committee form and circulate a questionnaire asking for constructive criticism about medical service. Dr. William Sprout was elected as alternate to the State Society. Dr. Norton announced the new County Judicial Council: Dr. Lee Hummell, chairman, Dr. C. B. Mackes, 1955, Dr. A. Jonas, 1956, Dr. Robert Cox, 1957. Letters from the Camden and Bergen societies were read, asking support for certain members as vice-president to the State Society. Dr. Norton read a letter regarding requirements for honorary membership in the State Society. Dr. Norton led a discussion regarding the corporate practice of medicine. Dr. Eugene Pashuk was elected as vice-president to replace Dr. Spangler. Dr. David W. Green resigned from the county Judicial Council. Dr. Ford Spangler resigned from the society because of his induction into the armed services. Dr. Frank Winters and Dr. Harold Mark were appointed as medical advisory committee for consulting with nursing and public health agencies.

Meeting adjourned to supper at 6:30 p.m.

CHARLES E. GILPATRICK, M.D.
Reporter

Somerset

A regular meeting of the *Somerset County Medical Society* was held on January 13 with Dr. M. E. Tolomeo, president, presiding. Due to inclement weather only 18 members were present, and the speaker of the evening, Dr. Bell of the Essex County Isolation Hospital, was unable to come.

After a number of items of business were discussed, the meeting was adjourned.

C. S. McKINLEY, M.D.
Reporter

Union

The regular meeting of the *Union County Medical Society* was held on January 12, at the White Laboratories in Kenilworth, with Dr. Edward G. Bourns, president, presiding. Dr. Anthony D. Crecca, Attending Thoracic Surgeon at St. Michael's Hospital, Newark, presented a paper and moving pictures on "Cardiac Emergencies in the Operating Room."

The business portion of the meeting was largely taken up in the reading of the revised constitution and by-laws for the society. This initial reading was accepted by unanimous vote.

New members taken into the society were as follows: Drs. Horace Gerarde, Linden, Adam Van Savage, Clark, and Ben Sheiner, Hillside; and by transfer, William R. Finnegan, Elizabeth, from Monmouth County, and Charles Neustein, Cranford, from King's County, N. Y.

MERTON L. GRISWOLD, JR., M.D.
Reporter

Woman's Auxiliary • • •

Safety Program

Our National President, Mrs. George Turner said "Medical Science will never produce a vaccine to prevent accidents." With that in mind, your safety committee has aimed to make as many people as possible safety conscious. We are doing it through distribution of pamphlets which stress safety in the home, on the farm, on the highway, and child safety. This information is going out through Women's Clubs, Service Clubs, Granges, S. S. Classes, P. T. Associations and D.A.R.s.

We have supported the "Slow Down and Live" campaign and "Save a Life" campaign. The latter stressed highway safety during the Holiday Season.

Brochures explaining the 1955 Carol Lane Awards have been distributed to all county auxiliaries with the hope that some of our members will plan projects to enter in this contest.

Our State Auxiliary is aiding the N. J. State Safety Council with arrangements for the ninth annual Home Safety Forum.

Many auxiliaries are including in their programs the safety play called "A Day in the Home" by Zada Richner. It shows how the small careless things we do in the home develop into serious accidents. More accidents happen in the home than anywhere else. More thoughtfulness for the risks we create for others when we leave things lying around can prevent much suffering. More than 40,000 children in the United States are permanently crippled by accidents each year. Children copy the things we do so let us set before them good examples of safety.

Highway safety signs have been accurately named "the signs of life." Let us observe them so that we may live and let live.

Mrs. Millard Cryder,
Chairman

Auxiliary Report • • •

Essex

The *Woman's Auxiliary to the Essex County Medical Society* held a Luncheon-Fashion Show on February 11 at 369 Park Avenue, Orange. Under the chairmanship of Mrs. Thomas Santoro, this was for the benefit of the American Medical Education Foundation. Mrs. Oswald Carlander, State A.M.E.F. chairman spoke. Other guests were: Mrs. Paul E. Rauschenbach, President of the Woman's Auxiliary to The Medical Society of New Jersey; Mrs. Andrew C. Ruoff, Sr., President-elect; and Mrs. Frank S. Forte.

On December 1, 1954 the Nurse Scholarship committee, working with the Nurse Recruitment committee, sent out letters to 29 principals and 15 superintendents of Essex County public and parochial schools requesting them to select one student each as a candidate. To qualify for a scholarship, she must have the necessary scholastic rating and be in need of financial aid. She must also submit a 200 word essay on "Why I Want To Study Nursing." Mrs. Otto G. Matheke, Jr. is chairman of Nurse Scholarship and Mrs. Edward P. Duffy, Jr. is Nurse Recruitment chairman.

Mrs. Anthony Giannotto, Booths chairman, expressed her thanks to the 24 Auxiliary members who so unselfishly gave of their time to sell Christmas Seals at our booth at Bamberger's last December. Proceeds during those 14 days amounted to $181.

An important date on our Auxiliary's calendar is March 16, 1955. Mrs. Frank Galioto, chairman, announces that the Public Relations Day program on that day will take place at 369 Park Avenue, Orange. "School Health" will be discussed by a panel of the following speakers: Dr. A. S. Harden, Jr., who will present the physician's viewpoint on school health; Mrs. Benjamin Leon, member of the Newark Board of Education, who will present the parent's viewpoint; Dr. Frank Stover, assistant Commissioner of Education for New Jersey, who will present the educator's viewpoint. Moderator will be Dr. Jerome Kaufman, advisor to the Woman's Auxiliary.

Subscription blanks for the A.M.A. *Bulletin* have been mailed along with the dues bills to each Auxiliary member.

Our membership to date is 463. The membership drive is still on and we would like to welcome many more Essex County doctors' wives.

MRS. THOMAS A. MESSINA
Chairman, Press and Publicity
MRS. JOSEPH DI NORCIA, Co-Chairman

Book Reviews • • •

Many of the reviews in this section are prepared in cooperation with the Academy of Medicine of New Jersey.

The Atom Story. J. B. Fineberg, M.Sc., with illustrations by Lewis and a foreword by Frederic Soddy, F.R.S. Pp. 243. New York, Philosophical Library, 1953. ($4.75)

This is a scholarly and literary historical account of man's search for understanding of his physical world. Recounting and analyzing man's groping for knowledge from Anaxagoras and Democritus to the present, the author relates the development of our present concept of the nature of matter.

In the 5th Century B. C. Democritus hypothesized that matter was composed of minute non-divisible particles. As early as the first century B. C. Lucretius wrote *De Rerum Natura*. In the 16th century A.D. Francis Bacon re-emphasized the atomic nature of matter. By the 19th century the concept of laboratory experimentation for evaluation of physical hypotheses was firmly established, and Dalton's Atomic Theory of molecular structure had been promulgated.

However, man had no sooner organized a comprehensive theory of the nature of the universe than his experimentation caused him to alter it. In 1895 with the discovery of x-rays, followed in 1896 by the discovery of radioactivity, some of the basic theories began to crumble. When in 1905 Einstein postulated that the atom is not indivisible and that matter is equivalent to energy, the atomic age was ushered in. The atomic explosion on the sands of Alamogordo was but the experimental confirmation of these theorems.

This scholarly analysis of the scientific method as applied to our physical world, is of interest to all who desire a broader background to contemporary non-biologic scientific thought. It is a book to be read slowly. Its knowledge relates not to science alone but also to philosophy and history.

WADE N. MILLER, M.D.

Lectures on General Pathology. Edited by Sir Howard Florey. Pp. 733. Philadelphia, Saunders, 1954. ($13.00)

This volume is a compilation of lectures on general pathology by specialists in their fields. It reflects the changes that take place in the body during disease by macroscopic and microscopic observation. The chemical changes in pathologic processes are minutely described. There is a detailed analysis of experimental procedures to show how these processes are produced. Their shortcomings are fully explained. The chapters on infection, immunity, and allergy are particularly detailed.

In addition to a chapter on the history and scope of pathology, there is a historical account of each of the pathologic changes. There is a wide array of photographs of the great men in medicine's past who are responsible for our knowledge of the changes in concepts of the complicated physical and chemical changes that take place in disease. The minute changes are amply illustrated by the most modern methods such as photomicrographs, electron micrographs, and fluorescent micrographs.

This book is a valuable one for all who are interested in medicine.

S. A. GOLDBERG, M.D.

The Pace Is Not Killing Us. By J. J. Rodale, Emmaus, Penna., 1954, Rodale Book, Inc. Pp. 65. ($1.00)

"There is" says Mr. Rodale, "double the amount of divorce than in the days of World War I. At the bottom of this lies malnutrition and also smoking." That's what it says, right on page 39 of this tract.

Mr. Rodale dismisses the idea that we are now living a fast-paced life which is responsible for heart disease and peptic ulcers. He points out that life was more rugged and stressful a century ago. Instead of pace of life, the real causes of the rising rate of peptic ulcer, alcoholism, divorce and heart disease are the way in which processing destroys the natural value of bread, plus the installation of chlorine in drinking water plus smoking.

Glad that *that* problem is solved.

SAMUEL POLLOCK, M.D.

Factors Affecting Costs of Hospital Care. Edited by John H. Hayes. Pp. 301. New York, Blakiston 1954. ($4.00)

Once upon a time a hospital was a sort of hotel where doctors housed their patients. It was that combined with an alms-house that had a large infirmary section. Today, the hospital has become bigger than the doctor who uses it and the patient who needs it. It is now a dynamic center for community health. Once doctors worked *in* a hospital. Now the hospital works the doctors. The doctors

are asked (often told) to contribute money to the hospital. This is sometimes so neatly pro-rated to the physician's hospital load that, in effect, it becomes a commission he pays for the privilege, a dignified split fee.

But, as evidenced by this report, the physician is still viewed by the hospital authorities as a necessary evil. Thus, "certain tendencies in medical education and in medical practice have brought about an overuse of technical procedures in hospitals." Mr. Hayes charges that some physicians "order tests merely because costs are covered by insurance." He has a way to get doctors to stop mistreating the hospitals. His suggestion is that physicians be warned that they had better do work-ups before admission ("obtaining as much data as possible prior to admission" is the way it is delicately expressed), they had better scrutinize with care every test ordered to make sure it is *really* needed, and that they had better be alert to stop medication the instant it becomes possible to do so. The report recommends that hospitals take more responsibility for general community health, provide more offices for private practitioners within their walls, and make much wider use of their outpatient facilities. To be sure, this would drain patients from private offices into hospital buildings. But it would increase hospital income.

Most hospitals have been free of deficits every year since 1949. This book is full of figures showing expenditure patterns by bed occupancy, length of stay, services offered and so on. It is written with the problems of hospital administrators in mind rather than with the problems of doctors or patients. In a burst of frankness, the writer states that "the patient in a private room became not merely a pay patient but an overpay patient."

HENRY A. DAVIDSON, M.D.

The Doctor Writes: An Anthology of the Unusual in Current Medical Literature. Edited by S. O. Waife, M.D. Pp. 175, New York, Grune and Stratton, 1954. ($3.75)

The editor of this interesting anthology has selected seventeen articles on diversified medical and "perimedical topics" from the vast medical literature published during 1953. These articles, often with intriguing titles, are reprints of widely-scattered papers chosen because of their interest of subject, excellence of writing or pleasure in reading. The contents are grouped into four sections; "Of Men and Medicine," "Looking Backward," "Reading and Writing," and "Art and Science." The authors of these unusual articles include such well-known medical writers as Drs. Otto Glasser, Sir John Charles, W. Barry Wood, Jr., and William Bennett Bean.

Each item in this well-chosen collection makes enjoyable reading. The topics have a special appeal to those who have the good fortune to appreciate medicine in its historical perspective. The first article, for example, describes Sherlock Holmes' uncanny powers of deduction, doubtless influenced by one of Conan Doyle's teachers in medical school. The next paper, by contrast, speculates on the origin of the queen in the game of chess. One author presents a remarkable collection of medical lore culled from the Bible. Another dispels the popular myth that physicians of the past possessed clinical acumen superior to today's practitioners. Other interesting reports concern postage stamps honoring medical heroes, a sensible plea to reduce multiple authorship in scientific papers, the bitter controversy that followed Roentgen's discovery of x-rays, and tricks of showmanship in medical teaching. An article in the form of a play, "An Unusual Obstetrical Case History, Derived from the Pen of W. Shakespeare," rates high for humor and literary novelty.

This book, intended to "afford emotional pleasure, intellectual profit, and spiritual peace" to anyone interested in the art of medicine, suceeds admirably in its purpose. Technically attractive, it will bear occasional re-reading because of the timeless quality of its contents. The individual authors link literary skill with a wide range of interesting themes, somewhat off the beaten track of medical writing. *The Doctor Writes* is a lasting type of medical book, one which can provide pleasure to all interested in good reading.

FRED B. ROGERS, M.D.

The Microphysical World. By William Wilson. New York 1954. The Philosophical Library. Pp. 217. ($3.75)

Doctors are supposed to be conversant with the natural sciences. Most of us, I suspect, are unfamiliar with the higher reaches of physics, botany or colloidal chemistry. But the public still looks on us as natural scientists. Hence the possible medical interest in this book. It includes a review of atoms, molecules, cathode rays, radiant heat, and the quantum theory. Unfortunately it is overloaded with mathematical equations which are darkly mysterious to me and, I am sure, to most medical practitioners. What, for instance, can *you* do with "v equals W divided by the product of 6 pi rho eta"? (That's the Stokes formula if you are interested). The author is good at giving the historical roots of the theories. At first it sounds simple enough. A man had an idea and tried an experiment and found thus and so. But at this point, Professor Wilson loses me. If you have a good grounding in intermediate physics and advanced algebra this will all be pi to you. Not to me.

VICTOR HUBERMAN, M.D.

TUBERCULOSIS *Abstracts*

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XXVII March, 1955 No 3

Changing Concepts in the Treatment of Tuberculosis

By Gustav A. Hedberg, M.D., The Medical Clinics of North America, July, 1954.

Before 1947 the treatment of pulmonary tuberculosis, based on rest and support to the patient, was well standardized. In institutions emphasis was placed on strict rest in bed and actual physical immobilization until the lesion had shown maximal improvement and signs of stabilizing. Usually the patient had reached an exercise level of four or more hours before discharge.

In addition to the basic treatment of rest, collapse measures were directed toward the pulmonary disease. Pneumothorax was the most popular procedure, though serious complications such as effusion and empyema sometimes followed. Later there was a trend toward "primary thoracoplasties" wherein permanent collapse was induced by rib section. Pneumoperitoneum became popular because it was considered harmless and tended to keep the patient in the sanatorium. There was always debate as to the value of phrenic-nerve interruptions. Resection for pulmonary tuberculosis was rare because of the operative danger as well as the danger of spread to the opposite lung.

Since the advent of antimicrobial drugs and the coincidental improvement in anesthesia and pulmonary surgery, tuberculosis therapy has been in continuous change. In 1947 when streptomycin became available the usual dose was 0.5 gram of the antibiotic given every six hours. Under this treatment there were frequent toxic complications, mainly vestibular damage and deafness. It was soon found that streptomycin and dihydrostreptomycin were not bactericidal agents but bacteriostatic. In many patients the surviving tubercle bacilli became resistant to the drug. As a result there was a tendency to introduce thoracoplasty or resection very early in the treatment. Reactivation and spread to other parts of the body were common. Many forgot that tuberculosis is a systemic disease that cannot be controlled by the excision or collapse of diseased parts alone. In 1949 para-aminosalicylic acid (PAS) became available. Streptomycin and PAS combined not only had increased therapeutic effect but tended to delay the emergence of resistant strains of tubercle bacilli.

Long-term effective chemotherapy made it possible to treat patients until maximal resolution had occurred, with resection of residual cavitary and, at times, other infected areas. The number of treatment failures as a result of earlier therapy was considerable. Some of these were salvaged when, in 1951, viomycin and, in 1952, isoniazid became available.

The treatment of tuberculosis has not yet stabilized except possibly in regard to the emphasis of long-term chemotherapy. Indications for resection are becoming more conservative.

Collapse therapy has been almost abandoned in the Nopeming Sanatorium (Minnesota). During the past two years the principle of strict rest in bed has also been abandoned except for toxic patients and those under orthopedic treatment. All are allowed a moderate amount of exercise including full bathroom privileges. The disability from physical inmmobilization has been reduced but it is more difficult to convince the patient of the necessity for sanatorium treatment. Much more time must be spent in the individual education of the patient regarding the problems of his disease as it relates to himself and to his family

and community. With chemotherapy, however, it has been possible to shorten the hospital stay for the intelligent and cooperative patient by a program of postsanatorium outpatient treatment with drugs, given under the supervision of the patient's private physician. The patient returns to the sanatorium periodically for intensive laboratory studies including the culture of gastric specimens. Three months after the end of treatment the patient is again hospitalized for such studies.

The factors taken into consideration in surgical treatment are the presence of residual cavitation and localized extensive nodular disease. Body section radiography is of great value. Operation is delayed until the patient is not excreting tubercle bacilli. If resection is performed the patient is kept on modified exercise for approximately two months, after which exercise is increased gradually. After discharge the patient continues his chemotherapy for a year or more depending upon residual known disease. This institution has become more conservative in recommending surgical treatment, since many resected specimens fail to demonstrate activity of the tuberculosis. Since 1951 only one patient in Nopeming Sanatorium who has taken a minimum of 100 grams of streptomycin with PAS and who has undergone resection has shown evidence of reactivation. Reactivation has occurred in a few patients treated by medical means alone.

It is impossible to evaluate the results of treatment at this time although the reactivation rate after discharge has definitely decreased. Previous to the advent of chemotherapy the reactivation rate among patients discharged as well or improved was approximately 33 per cent over a five-year period.

One might ask why sanatorium care is necessary with present definitive treatment. Why not start a patient on antimicrobial therapy and hospitalize him only for periodic intensive study and during surgical treatment? There are two main reasons for hospitalization during the active period of a person's tuberculosis.

First, patients with active tuberculosis are an actual or potential public health menace, even with intensive drug treatment. Second, it has not been proved that drugs alone "cure" tuberculosis; rest and support promote the patient's innate ability to heal his disease. Further, all the drugs in use have toxic potentialities and some are difficult to take. Toxic manifestations aside from deafness and vertigo are often asymptomatic, requiring repeated laboratory studies. The patient must be taught the importance of taking the prescribed doses of the drugs. Until a "miracle drug" becomes available which is capable of killing the tubercle bacilli quickly, hospitalization during the active stage is necessary.

Two age groups have increased in the sanatorium population—the very young and the very old. The proportion of men more than 60 years of age is steadily increasing. In this group long-term chemotherapy and hospitalization during the entire period of treatment have shown encouraging results. Many continue as chronic active cases, certainly a dangerous group in any community.

The very young are best handled in a hospital. Active primary tuberculosis reponds to antimicrobial therapy with rapid conversion of the bacteriologic findings but slow improvement in the pulmonary and glandular lesions.

The present treatment of tuberculosis has far from stabilized and many questions plague the physician. Is there too much dependence on the examination of surgical specimens? Have the earlier procedures been dropped too quickly? Should pneumothorax be reconsidered in conjunction with drug therapy rather than resection?

Meantime the problem of tuberculosis remains that of the community and of the individual. More thorough search for the unknown cases must be instituted. Persons with apparently inactive tuberculosis must be checked periodically and all persons with positive tuberculin reactions should be followed by periodic roentgenograms in order to find the disease in its earliest stages.

NEW JERSEY TRUDEAU SOCIETY
is the medical section of
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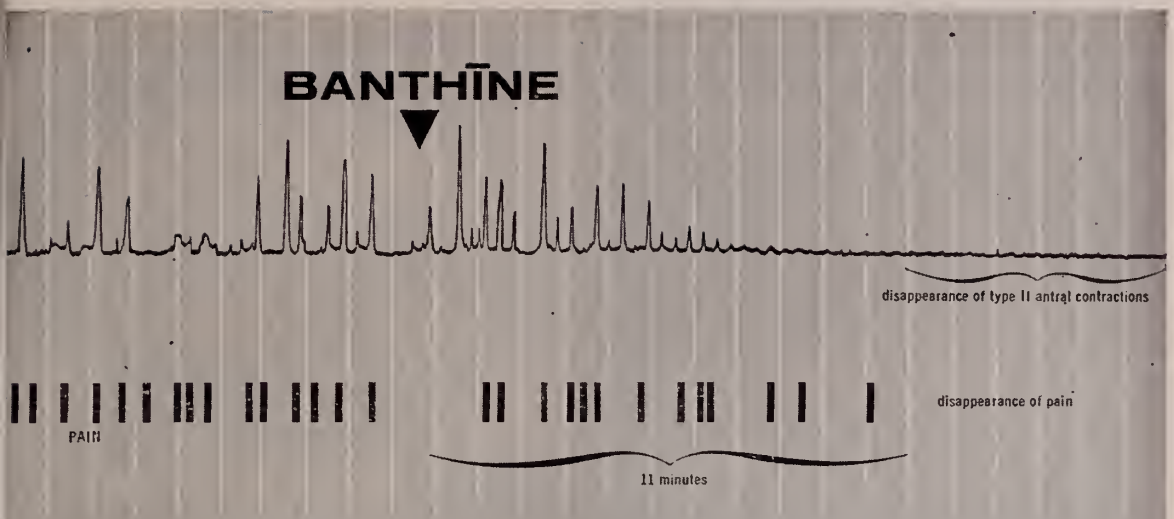

Effect of 100 mg. of Banthīne administered orally on antral gastric motility and duodenal ulcer pain.

Hightower, N. C., Jr., and Gambill, E. E.: Gastroenterology 23:244 (Feb.) 1953.

Hypermotility and Hyperacidity

A recent evaluation of anticholinergic therapy in peptic ulcer emphasizes the fact that now the profession has at its disposal agents that are "effective in reducing both secretory and motor activity of the stomach."

The effect on motor activity is generally more pronounced and less variable than on secretion; pain relief is usually prompt; a high degree of effectiveness is noted in ambulatory ulcer patients.

Ruffin, J. M.; Texter, E. C., Jr.; Carter, D. D., and Baylin, G. J.: J.A.M.A. 153:1159 (Nov. 28) 1953.

With its proved anticholinergic effectiveness, Banthine has been found extremely useful in the medical management of active peptic ulcer, whether duodenal, gastric or marginal.

The immediate increase in subjective well-being and the simplicity of the Banthine regimen assures patient cooperation. The recommended initial therapeutic dose is 50 or 100 mg. (one or two tablets) every six hours around the clock, with subsequent individual adjustment. The usual measures of diet regulation, rest and relaxation should be followed.

Banthine is effective in other conditions caused by excess parasympathetic stimulation. These include hypertrophic gastritis, acute and chronic pancreatitis, biliary dyskinesia and hyperhidrosis. Banthine is contraindicated in the presence of glaucoma and should be used with caution in the presence of severe cardiac disease or prostatic hypertrophy.

Banthine bromide (brand of methantheline bromide) is supplied in scored tablets of 50 mg. and in ampuls of 50 mg. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.

SEARLE

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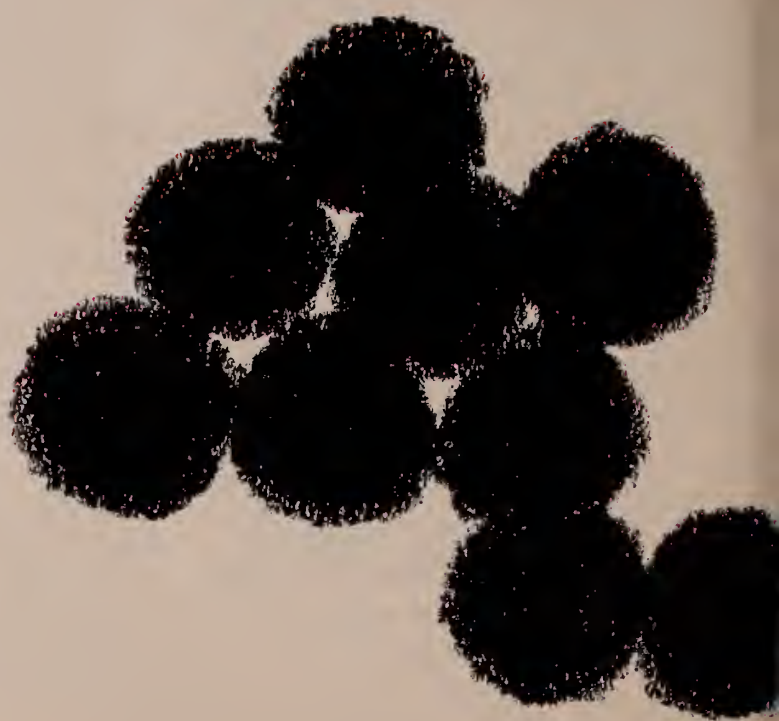

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*Pratt, R., & Dufrenoy, J.: Texas Rep. Biol. & Med. *12*:145, 1954.

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THE JOURNAL

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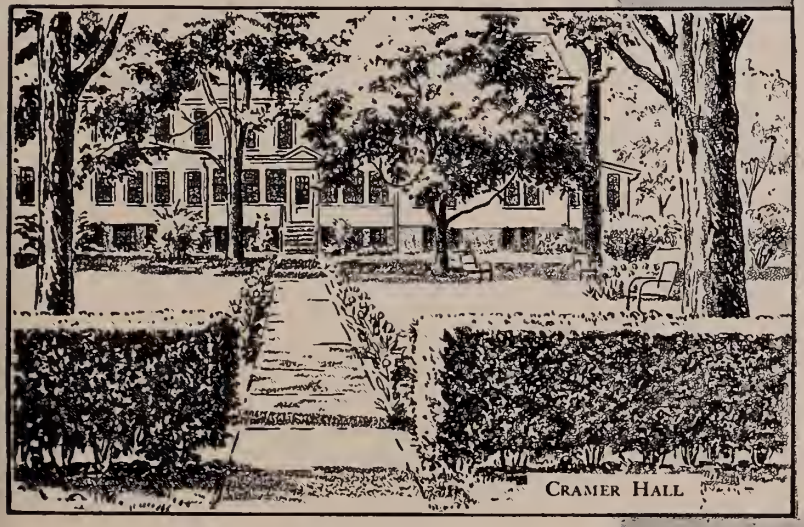

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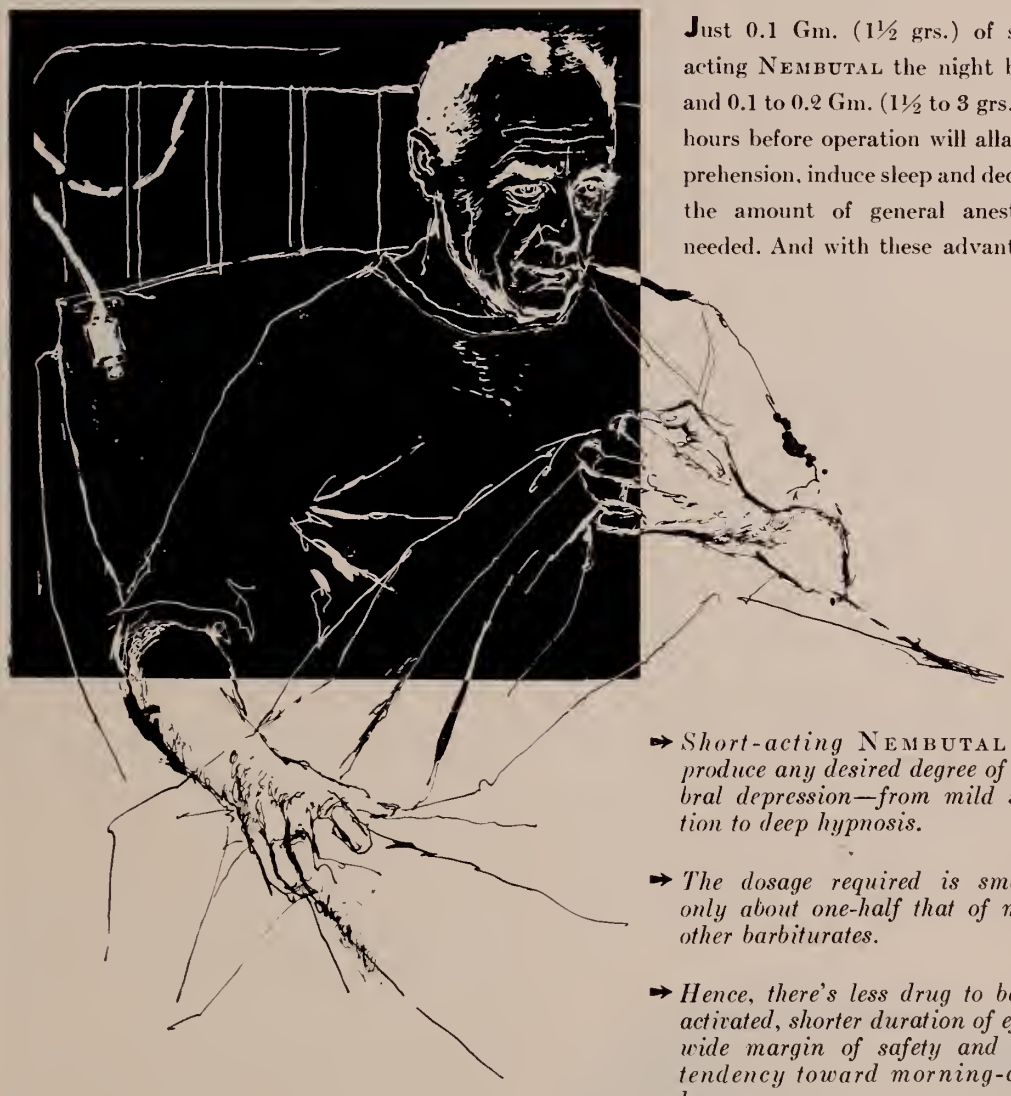

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The discovery of transistors to replace conventional vacuum tubes opened a bright new horizon of help for those who are hard-of-hearing. But price—and price alone—has kept many from enjoying the greater hearing-aid clarity, compactness, convenience and low operating cost offered by this modern "electronic miracle."

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BELLEVILLE
William C. Smith, Opt., 334 Washington Ave.

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Myerson's Pharmacy, 36 N. Washington Ave.

BOUND BROOK
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CAMDEN
Bernkof-Kutner Optical Co., 213 No. Broadway

CARTERET
Gruhin's Pharmacy, 78 Roosevelt Avenue

CLIFFSIDE PARK
Cliffside Hearing Center, 659 Anderson Avenue

DOVER
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F. G. Hoffritz, 30 Park Place

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Academy Hearing Center, 201 Washington Street
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Tobin's Drug Store, 335 George Street

NEWTON
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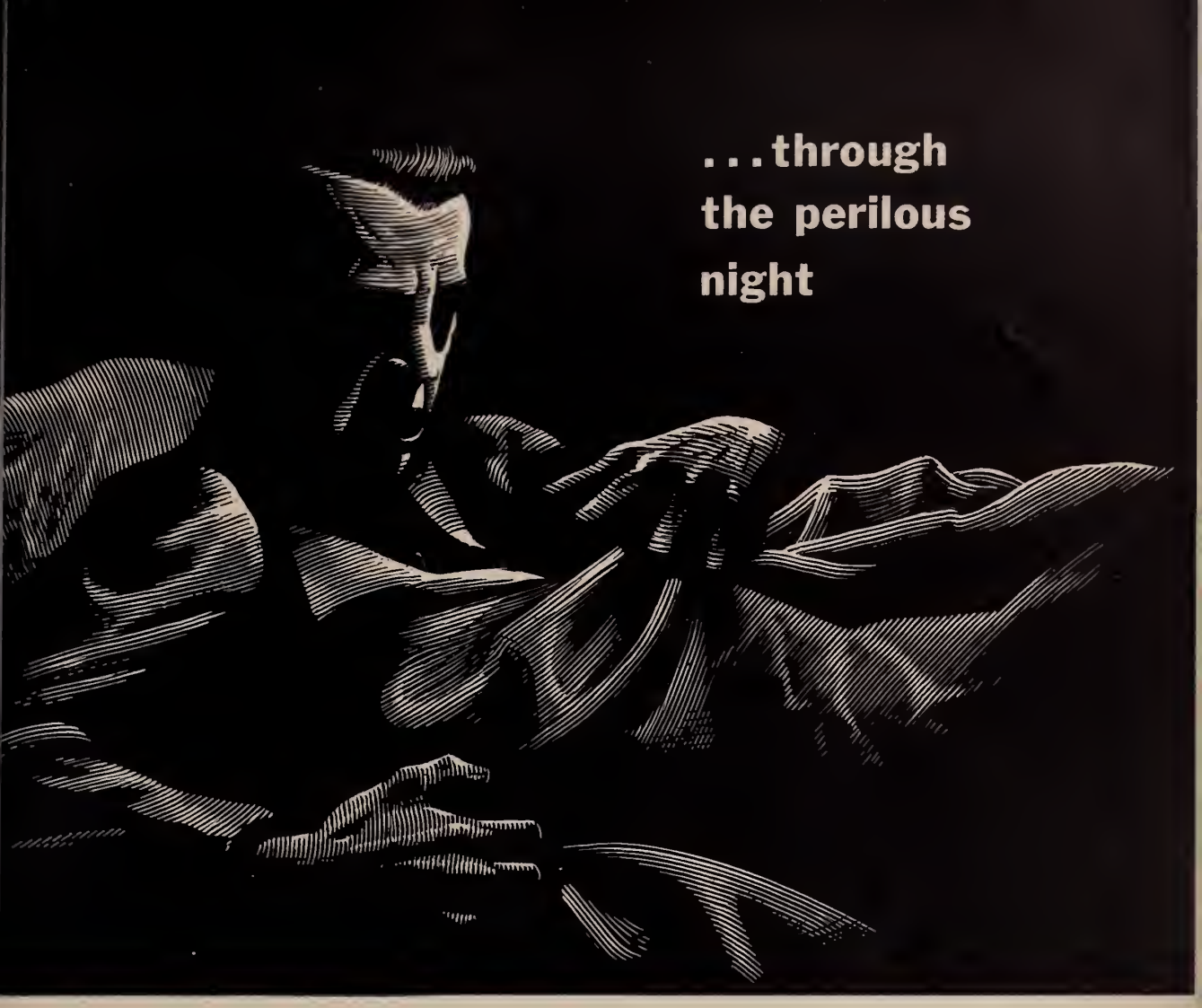

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Fear is a faithful companion. In angina pectoris, particularly, many patients live in constant dread of recurrent attacks.

Prophylaxis with Peritrate, a long-acting coronary vasodilator, offers new security in a majority of such cases. A single dose affords protection for as long as 4 to 5 hours, compared to 30 minutes or less with nitroglycerin.

Different investigators[1-3] observed that 80% of their patients responded to Peritrate therapy with fewer, less severe attacks . . . reduced nitroglycerin dependence . . . improved EKG's.

A variety of convenient dosage forms now extends these benefits. Adapted to the recommended daily dosage of 40-80 mg., Peritrate is available in 10 mg. and 20 mg. tablets. To help allay the fear of nighttime attacks, Peritrate Delayed Action (10 mg. tablets) may be taken with the regular bedtime dose of Peritrate (plain).

1. Winsor, T., and Humphreys, P.: Angiology *3*:1 (Feb.) 1952. 2. Plotz, M.: New York State J. Med. *52*:2012 (Aug. 15) 1952. 3. Dailheu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.

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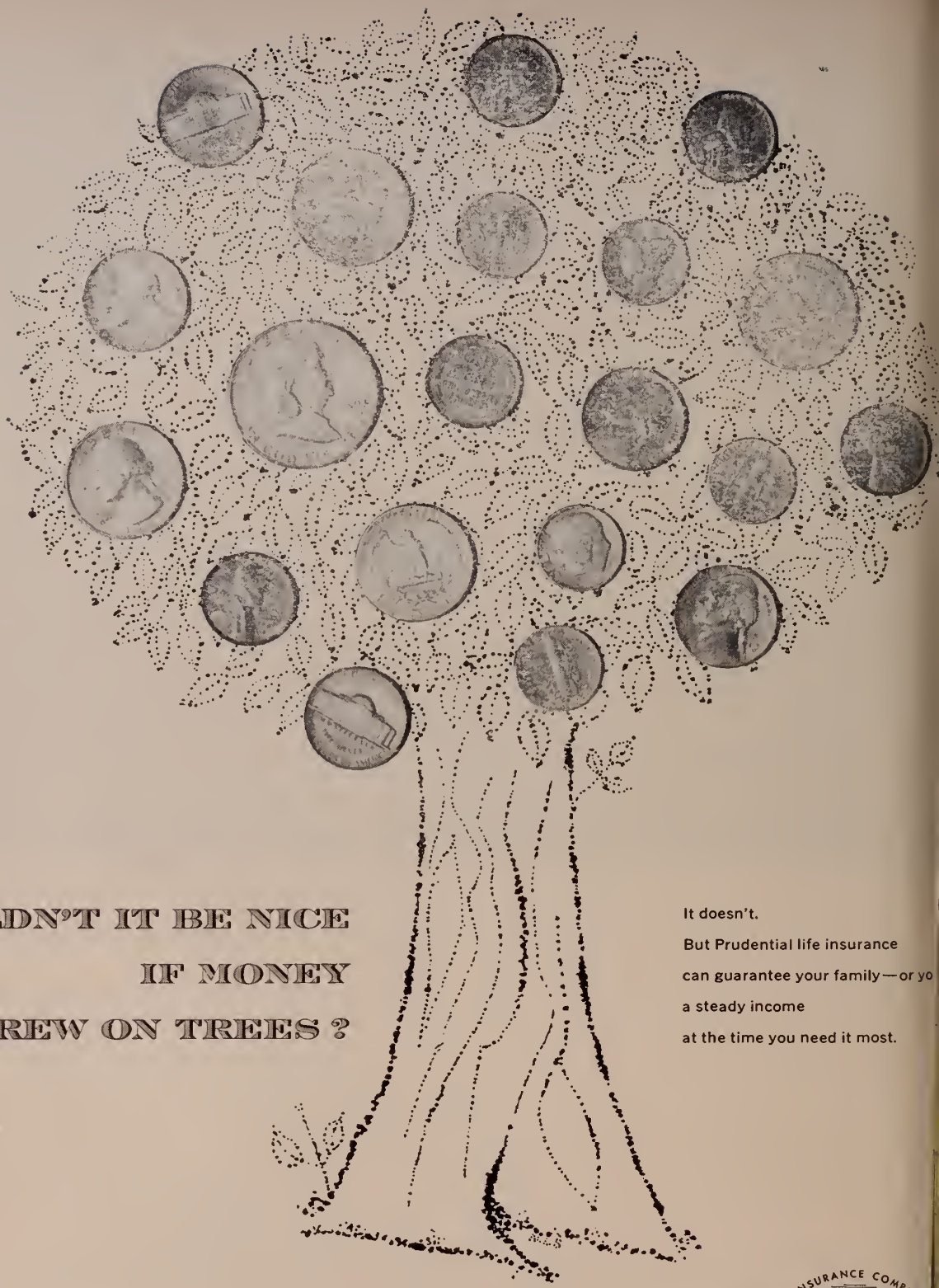

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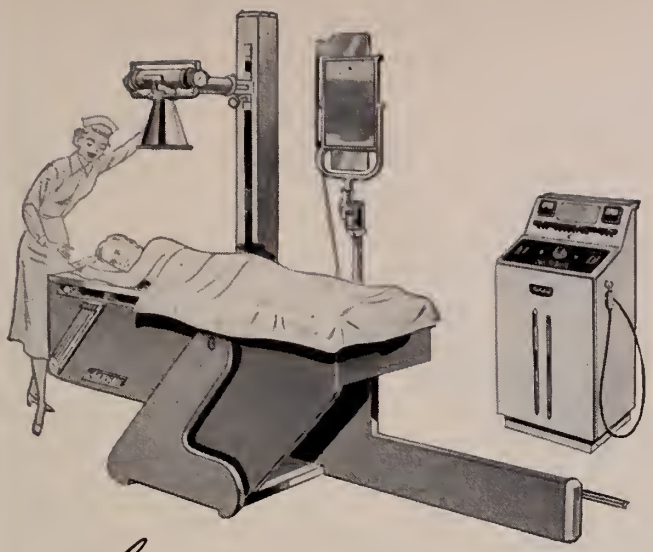

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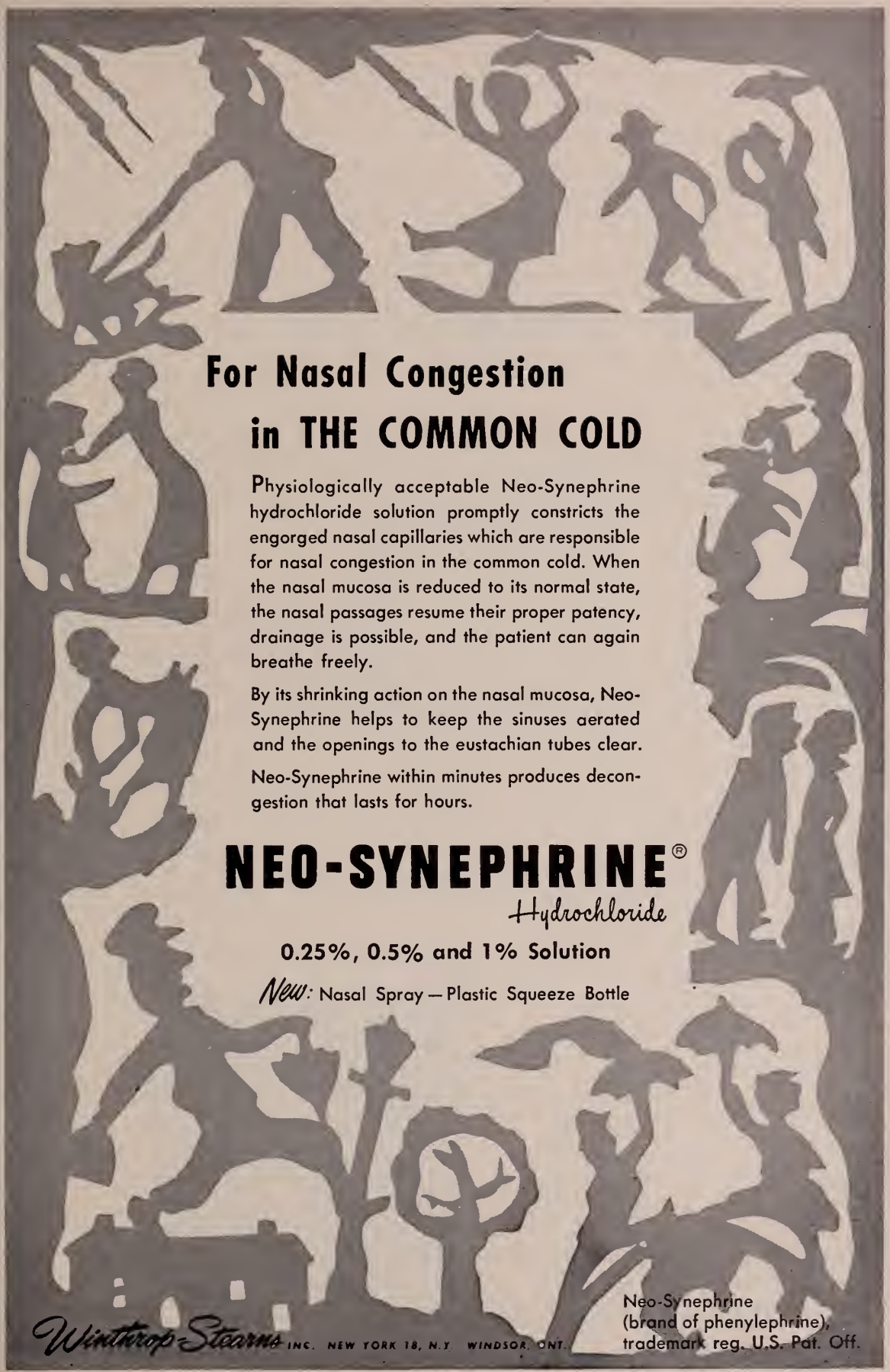
The very effective "Lotion B" turns out to be . . . MENNEN BABY MAGIC SKIN CARE. *You* will find it as non-drying and helpful as did the author.

*Study conducted at The Hahnemann Medical College and Hospital of Philadelphia.

**Fischer, C. C. Clinical Study of Skin Rashes during the Newborn Period, Am. J. Dis. Child. 85: 688-693, 1953.



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Physiologically acceptable Neo-Synephrine hydrochloride solution promptly constricts the engorged nasal capillaries which are responsible for nasal congestion in the common cold. When the nasal mucosa is reduced to its normal state, the nasal passages resume their proper patency, drainage is possible, and the patient can again breathe freely.

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READING TIME—1 MINUTE

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Only Viceroy gives you, your patients, and all cigarette smokers 20,000 Filter Traps in every filter tip. These filter traps, doctor, are composed of a pure white non-mineral cellulose acetate. They provide the maximum filtering efficiency possible without affecting the flow of smoke or the full flavor of Viceroy's quality tobaccos.

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Successor to *Western Electric* Hearing Aid Division
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all-transistor Model 72 by Audivox

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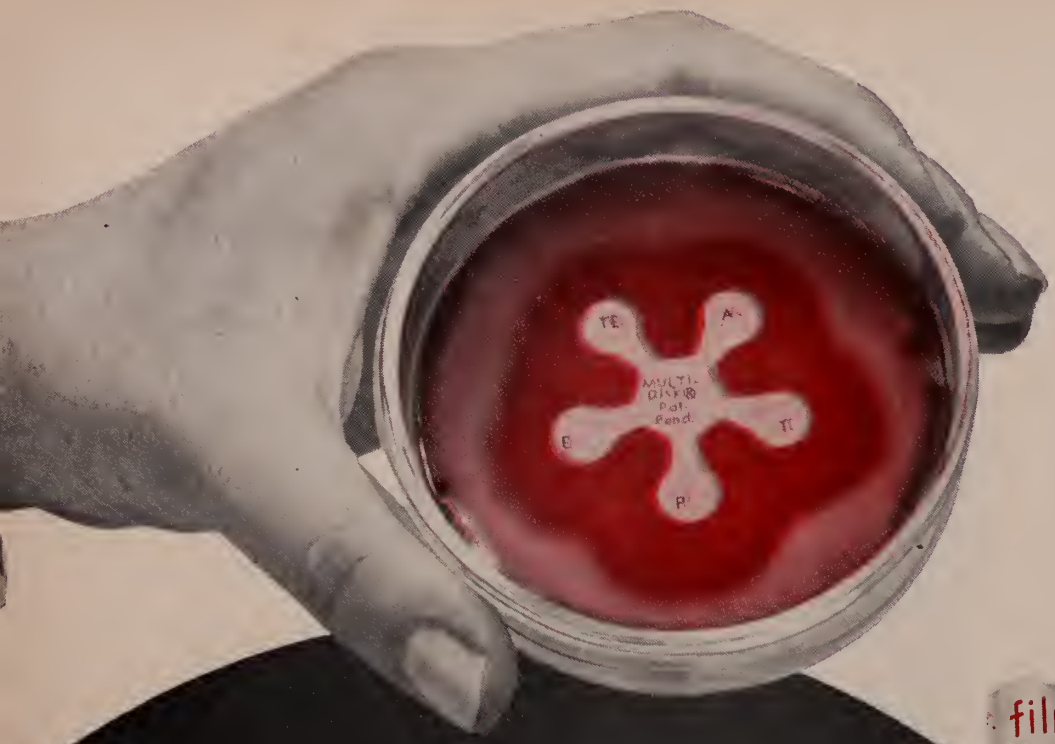
the pedigreed hearing aid.

specific therapy against the cocci...



Now, you can prescribe an antibiotic (*Filmtab* ERYTHROCIN) that is specific therapy for most bacterial respiratory infections. Specific therapy—because these infections are caused by staph-, strep- or pneumococci. *And the cocci are the very organisms most sensitive to* ERYTHROCIN. In fact, you'll find ERYTHROCIN more active against this group of organisms than many other antibiotics.

filmtab **Erythrocin®** STEARATE

(ERYTHROMYCIN STEARATE, ABBOTT)

Against streptococci

This is an actual sensitivity test with a strain of *Streptococcus pyogenes* on a blood agar plate. Note the high activity of ERYTHROCIN against this organism. This same streptococcus may be associated with *sinusitis . . . otitis media . . . tonsillitis . . . pneumonia . . . empyema . . . pharyngitis . . . septicemia . . . tracheobronchitis . . . streptococcal sore throat . . . scarlet fever . . . erysipelas . . . certain urinary tract infections . . .* and certain cases of *subacute bacterial endocarditis* and *osteomyelitis.*

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...with little risk of serious side effects

The main reason is because ERYTHROCIN acts specifically. It destroys only harmful coccic invaders—yet doesn't materially change normal intestinal flora. *Thus, your patients rarely get side effects from* ERYTHROCIN. Nor do they get the allergic reactions sometimes seen with penicillin therapy. *Filmtab* ERYTHROCIN (100 and 200 mg.) comes in bottles of 25 and 100. Won't you prescribe *Filmtab* ERYTHROCIN—soon? Abbott

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Karo Syrup... a carbohydrate of choice in "milk modification" for 3 generations

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Karo is well tolerated, easily digested, gradually absorbed at spaced intervals and completely utilized. It is a balanced fluid mixture of maltose, dextrins and dextrose readily soluble in fluid whole or evaporated milk. *Precludes* fermentation and irritation. Produces no intestinal or hypoallergenic reactions. Bacteria-free Karo is safe for feeding prematures, newborns, and infants —well and sick.

Light and dark Karo are interchangeable in formulas; both yield 60 calories per tablespoon.

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Behind each bottle three generations of world literature

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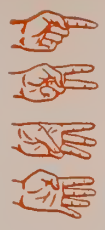

wide spectrum of effectiveness
rapid diffusion
prompt control of infection
minimum side effects

the decision often favors

ROMYCIN*

HYDROCHLORIDE
TETRACYCLINE HCl *LEDERLE*

Compared with certain other antibiotics, ACHROMYCIN offers a broader spectrum of effectiveness, more rapid diffusion for quicker control of infection, and the distinct advantage of being well tolerated by the great majority of patients, young and old alike.

Within one year of the day it was offered to the medical profession, ACHROMYCIN had proved effective against a wide variety of infections caused by Gram-negative and Gram-positive bacteria, rickettsiae, and certain viruses and protozoa.

With each passing week, acceptance of ACHROMYCIN is still growing. ACHROMYCIN, in its many forms, has won recognition as a most effective therapeutic agent.

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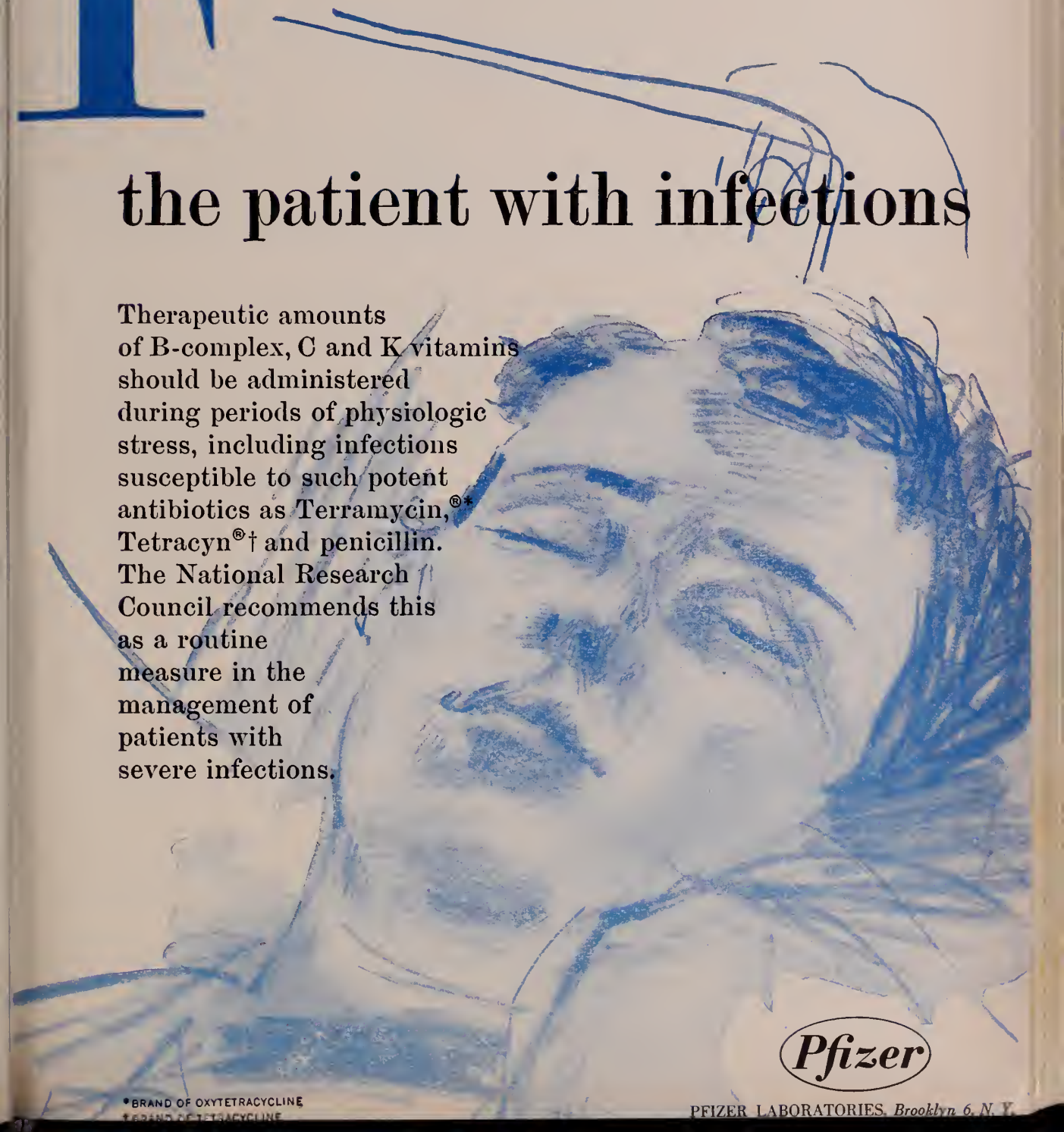
*REG. U. S. PAT. OFF.

Stress
Fortify
the patient with infections



Therapeutic amounts of B-complex, C and K vitamins should be administered during periods of physiologic stress, including infections susceptible to such potent antibiotics as Terramycin,®* Tetracyn®† and penicillin. The National Research Council recommends this as a routine measure in the management of patients with severe infections.

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. . . brings quick, sure relief. Just two or three SELSUN applications relieve itching, burning scalps. Four or five more completely clear scaling. Then each SELSUN application keeps the scalp free of scales *for one to four weeks.* And SELSUN completely controls 81-87% of all seborrheic dermatitis cases, 92-95% of dandruff cases.

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no "rest" periods... no refractoriness

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no unwanted enzyme inhibition in other parts of the body.

standard for initial control of severe failure MERCUHYDRIN® SODIUM

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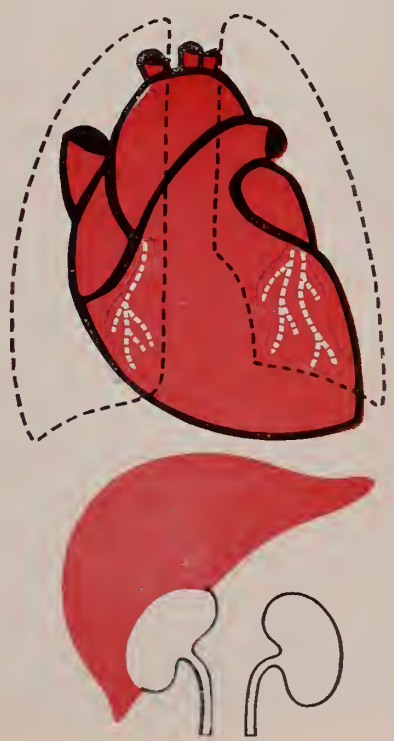

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1. Bunim, J. J.; Pechet, M. M., and Bollet, A. J.: J.A.M.A. *157*:311 (Jan. 22) 1955.

2. Waine, H.: Bull. Rheumat. Dis. *5*:81 (Jan.) 1955.

3. Herzog, H. L., and others: Science *121*:176 (Feb. 4) 1955.

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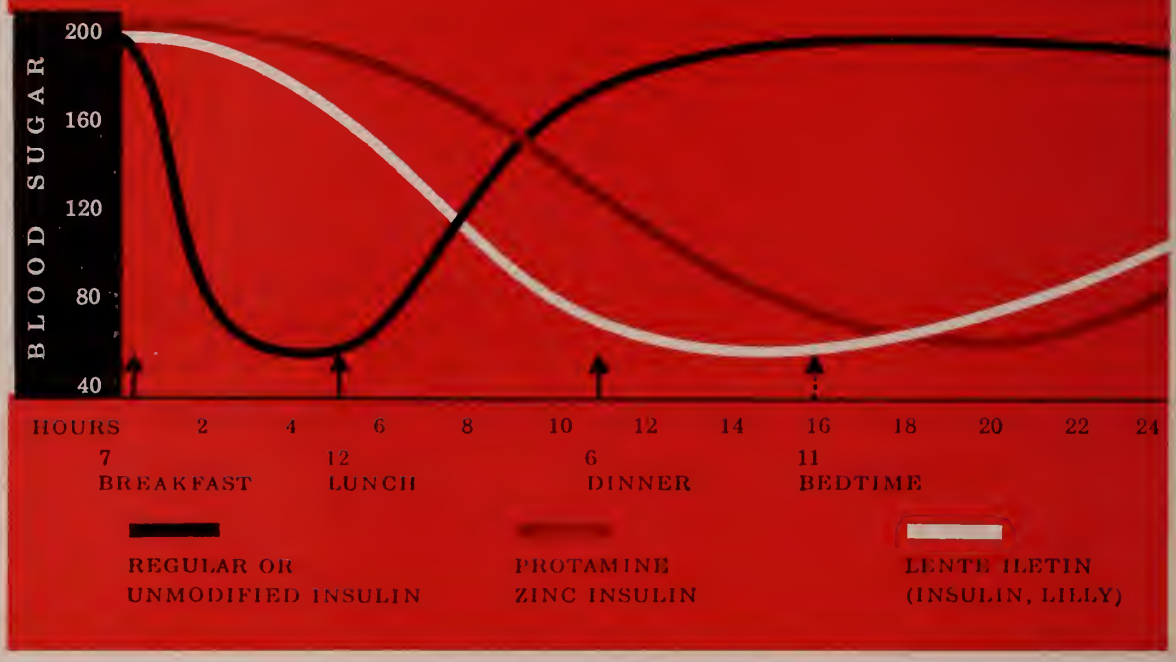

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THE JOURNAL
OF
THE MEDICAL SOCIETY OF NEW JERSEY

Editorials • • •

Atlantic City in the Spring

With the Garden State Parkway and the New Jersey Turnpike both in operation, you can reach Atlantic City from any part of the state in less than 2½ hours. The last reason for *not* going has thus been removed.

People come from all over the world to play and work in Atlantic City. With this famous resort in our own front-yard, one would expect New Jersey physicians to come to Absecon Isle in droves, flocks and bevies. And half of them do. But half of them don't.

This is not the place to point an admonishing finger at those who stay away. Let the record speak for itself. What do *you* want to do in Mid-April?

Want to work? Come to the Annual Meeting of The Medical Society of New Jersey and we'll put you to work all right.

Want to learn something? Come to any of the special or general sessions and find out what's going on in medicine.

Want to meet your old friends? What better place than the Boardwalk?

Want to know what's cooking in the field of newer and better drugs and appliances? Then browse through the commercial exhibits at the Annual Meeting.

Want to keep up to date in medicine? Then look at the scientific exhibits and sample the scientific papers being presented.

Want to play? Here's the playground of the world right in Atlantic City.

Next question—.

Published Monthly Since 1904
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J. Lawrence Evans, Jr., M.D., *Chairman*

Henry A. Davidson, M.D., Editor
Miriam N. Armstrong, Assistant Editor

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THE 189th ANNUAL MEETING

OF

THE MEDICAL SOCIETY OF NEW JERSEY

THE AMBASSADOR, ATLANTIC CITY

APRIL 17, 18, 19 and 20, 1955

DAILY SCHEDULE

Saturday, April 16, 1955

8:00 p. m.—Board of Trustees
Board Room, Lobby Floor

Sunday, April 17, 1955

10:00 a. m.—Registration Opens
Lounge Floor

2:00 p. m.—House of Delegates
Renaissance Room, Lounge Floor

8:30 p. m.—Nominating Committee
Board Room, Lobby Floor

8:30 p. m.—Public Relations Conference
Room 125, First Floor

Monday, April 18, 1955

9:00 a. m.—Exhibits Open
Lounge Floor

10:00 a. m.—Sections:
Allergy
22 Club, Lobby Floor
Chest Diseases
Renaissance Room, Lounge Floor
Dermatology
Room 105, First Floor
Gastro-Enterology and Proctology
Room 125, First Floor
General Practice
Venetian Room, Lounge Floor
Otolaryngology
Room 110, First Floor
Radiology
Room 118, First Floor

10:00 a. m.—Reference Committees:
"A"
Room 102, First Floor
"B"
Room 103, First Floor
"C"
Room 108, First Floor
"D"
Room 107, First Floor

12:30 p. m.—House of Delegates (election)
Renaissance Room, Lounge Floor

1:00 p. m.—Luncheons:
Section on Allergy and New Jersey Allergy Society
Board Room, Lobby Floor
Section on Chest Diseases and New Jersey Chapter, American College of Chest Physicians
Embassy Room, Lounge Floor
Section on Dermatology and New Jersey Dermatological Society
Room 122, First Floor

2:00 p. m.—Reference Committees:
"E"
Room 102, First Floor
Constitution and By-Laws
Room 103, First Floor
Miscellaneous Business
Room 107, First Floor
Resolutions and Memorials
Room 116, First Floor

2:30 p. m.—General Session on Obstetrics and Gynecology
Venetian Room, Lounge Floor

6:00 p. m.—Technical Exhibitors' Buffet-Supper (by invitation only)
22 Club, Lobby Floor

8:30 p. m.—General Session
Renaissance Room, Lounge Floor

Tuesday, April 19, 1955

9:30 a. m.—House of Delegates
Renaissance Room, Lounge Floor

2:30 p. m.—General Session on Medicine
Venetian Room, Lounge Floor

7:00 p. m.—Dinner-Dance
Renaissance Room, Lounge Floor

Wednesday, April 20, 1955

9:30 a. m.—Sections:
Cardiovascular Diseases
Venetian Room, Lounge Floor
Metabolism
Room 125, First Floor
Neuropsychiatry
Renaissance Room, Lounge Floor
Ophthalmology
Room 110, First Floor
Rheumatism
Room 118, First Floor
Urology
22 Club, Lobby Floor

10:00 a. m.—Section on Clinical Pathology
Room 105, First Floor

12:30 p. m.—Board of Trustees
Board Room, Lobby Floor

12:30 p. m.—Luncheons:
Section on Clinical Pathology and New Jersey Society of Clinical Pathologists
Room 105, First Floor
Section on Metabolism and Medical Members, New Jersey Diabetes Association
Room 125, First Floor
Section on Neuropsychiatry
Room 122, First Floor
Section on Ophthalmology
Room 110, First Floor
Section on Rheumatism
Room 118, First Floor
Section on Surgery and New Jersey Chapter, American College of Surgeons
Embassy Room, Lounge Floor

2:00 p. m.—General Session on Surgery
22 Club, Lobby Floor

3:00 p. m.—Exhibits Close
Lounge Floor

4:00 p. m.—Registration Closes
Lounge Floor

GENERAL SESSION

Monday Evening, April 18, 1955

8:30 p.m.

Renaissance Room, Lounge Floor

Presiding: Elton W. Lance, M.D., President

National Anthem

Inaugural Address
Vincent P. Butler, M.D., President-Elect

Musical Selections
Joseph Stern's Orchestra

A MESSAGE FROM A SENATOR TO THE DOCTORS OF HIS STATE
Honorable Clifford P. Case, United States Senator from New Jersey

An open meeting for all members of the Society and the Woman's Auxiliary, representatives of the allied professions, and the press.

DINNER-DANCE

Tuesday Evening, April 19, 1955

7:00 p.m.

Renaissance Room, Lounge Floor

honoring

PRESIDENT AND MRS. ELTON W. LANCE

Toastmaster
Edward G. Bourns, M.D.

Welcome
Mrs. Paul E. Rauschenbach, President, Woman's Auxiliary

Introductions:
Mrs. Andrew C. Ruoff, President-Elect, Woman's Auxiliary
Vincent P. Butler, M.D., President-Elect

Presentation of Fellow's Key
To: Elton W. Lance, M.D., President
By: Henry B. Decker, M.D., Immediate Past-President

Entertainment
Harold Barry, M.C. and Story Teller
Andy Arcari, Accordion Soloist
Bill and Barbara Duff, Ball-room Dancers
Jack and Mildred Pitchon, Singers

Music
Joseph Stern's Orchestra

SCIENTIFIC SESSIONS

Monday Morning, April 18, 1955

SECTION ON ALLERGY

WILLIAM GREIFINGER, M.D., Chairman, Newark
JOSEPH SKWIRSKY, M.D., Secretary, Newark

22 Club, Lobby Floor

10:00 a. m.

The Prevention of Man-Made Allergic Problems

Will Cook Spain, M.D., Professor of Clinical Medicine, New York University Postgraduate Medical School, New York, N. Y.

General Discussion

The concept, once held, that coryza, asthma and dermatoses occurred spontaneously and were unavoidable and inevitable, has been greatly modified, since the development of such therapeutic agents as antitoxins and antibiotics; and the exposure of the individual to dyes, drugs and other chemicals of synthetic origin. These induced and largely preventable conditions have markedly increased the field of allergy.

10:30 a. m.

The Present Status of the Atopic Dermatitis Problem

Rudolf L. Baer, M.D., Associate Professor of Clinical Dermatology and Syphilology, New York University Postgraduate Medical School, New York, N. Y.

General Discussion

According to newer studies patients with atopic dermatitis tend to show not only an atopic background and certain immunologic stigmata, but also many non-allergic stigmata, involving the vascular apparatus, sweat mechanism, resistance of the skin to virus infections and so on. Prevention and management of atopic dermatitis, based on this newer knowledge will be discussed.

11:00 a. m.

Business Session

11:15 a. m.

Allergy in the Eye

Emanuel Rosen, M.D., Surgeon, Eye and Ear Infirmary, Newark

General Discussion

A summary of well known ocular allergic conditions is rapidly reviewed. Some new ocular syndromes are introduced including Parakeetosis, Hypergia of the cornea, the Grandparent Syndrome, the Dental Syndrome. The importance of biomicroscopy in allergy of the eye is illustrated. Because of the inter-relationship between these specialties, it behooves us to obtain more than a cursory groundwork in the other's specialty.

11:45 a. m.

The Role of Histamine in Medical and Allergy Practice

Ralph I. Alford, M.D., Attending Physician, Mountainside Hospital, Montclair

General Discussion

Histamine is the most widely distributed substance in living tissues. Its physiologic actions are specific and have dramatic effects on animal and human organisms. These effects have been studied intensively and have brought forth voluminous literature. However, the significance of this knowledge of physiology has not yet been realized fuliy in its clinical application. There are specific indications for its clinical use. This presentation will review our knowledge of the physiology of histamine and will evaluate the present and future status of this substance.

1:00 p. m.

Luncheon of Section on Allergy and New Jersey Allergy Society

Board Room, Lobby Floor

SECTION ON CHEST DISEASES

LEWIS F. BAUM, M.D., Chairman, South Orange
EMANUEL KLOSK, M.D., Secretary, Newark

Renaissance Room, Lounge Floor

10:00 a. m.

Diaphragmatic Hernia

Adrian M. Sabety, M.D., East Orange, Assistant Attending Thoracic Surgeon, Orange Memorial Hospital, Orange

Co-Author: Arthur R. Abel, M.D., Attending Pathologist, Orange Memorial Hospital, Orange

There is a widespread but erroneous belief that diaphragmatic and hiatus hernia are not fatal or incapacitating. In reality, the symptoms of such an abnormality may be distressing. The complications may be very serious and occasionally fatal. We will clarify these points by presentation of illustrative cases.

Monday Morning, April 18, 1955

10:15 a. m.

Indications and Contraindications for Coronary Operations and the Evaluation of Coronary Surgery

Nicholas A. Antonius, M.D., Director of Cardiology, St. Michael's Hospital, Newark

Animal research at St. Michael's Hospital has convinced us of the validity of the procedures for revascularization of the myocardium, as tested by the method of Beck. Clinical results have confirmed the observations of animal experimentation. Based on clinical considerations a comprehensive classification of indications and contraindications for surgery is presented. The postoperative results in 30 cases using various surgical technics is reviewed.

10:30 a. m.

The Surgical Treatment of Thoracic Cage Deformities

Alfred R. Henderson, M.D., Asbury Park, Attending Thoracic Surgeon, Fitkin Memorial Hospital, Neptune

Co-Author: Houshang Hakim, M.D., Resident in Chest Surgery, Fitkin Memorial Hospital, Neptune

Thirty cases are presented. Most of them are pectus excavatum types of deformities. Indications for surgery and age at which surgery seems most suitable are detailed. The complications associated with unoperated cases are discussed. The lack of operative mortality or postoperative complications in this series emphasizes the feasibility of correcting such deformities at a relatively early age.

10:45 a. m.

Extent of Thoracoplasty After Pulmonary Resection

Philip J. Kunderman, M.D., Attending Surgeon, St. Peter's and Middlesex General Hospitals, New Brunswick

The resection of any significant amount of lung tissue results in a space which is eventually obliterated. This may be accomplished by either filling the space with fluid, by overexpansion of the remaining pulmonary tissue or by shifting adjacent tissue. The disadvantages of the first two methods are pointed out. Of the latter methods, shift of the decostalized chest wall, *i.e.*: thoracoplasty, is the most satisfactory. However, this should be a true tailoring thoracoplasty and should not collapse or compromise any of the remaining lung. Our method of accomplishing this is described.

11:00 a. m.

Business Session

11:10 a. m.

Atypical Roentgen Configuration of Pleural Effusions

Emanuel Klosk, M.D., Adjunct in Medicine, Beth Israel Hospital, Newark, and

Arthur Bernstein, M.D., Associate Attending in Medicine, Beth Israel Hospital, Newark

The Roentgen configuration of unusual pleural effusions associated with heart disease will be presented. X-ray criteria for the diagnosis of interlobar and infra-pulmonary collections of fluid will be reviewed, and pathogenesis discussed.

11:25 a. m.

The Problem of Solitary Circumscribed Dense Pulmonary Lesions

Samuel Cohen, M.D., Director of Medicine, B.S. Pollak Hospital for Chest Diseases, Jersey City, and

Frank Bortone, M.D., Director of Surgery, B.S. Pollak Hospital for Chest Diseases, Jersey City

Circumscribed, dense pulmonary lesions often prove to be malignant, particularly in individuals above the age of 40. Diagnostic tools in the clinical and x-ray work-up in these cases are evaluated. Management is discussed with emphasis on exploratory thoracotomy followed by resectional therapy when suitable. The pathologic findings and results in 11 resected cases are presented. The need for swift and accurate diagnosis is demonstrated.

11:40 a. m.

Acute Bronchopulmonary Suppuration: Therapy with Endoscopic Application of Oleaginous Penicillin

A. Albert Carabelli, M.D., Attending in Thoracic Medicine, St. Francis Hospital, Trenton

Acute bronchopulmonary suppuration is better classified as *acute suppurative segmental bronchopneumonitis, obstructive in type.* This is in harmony with both radiologic and bronchologic aspects of the disease. Antibiotic therapy, (aerosol or parenteral) has not been particularly effective. A new method of endobronchial instillation of oleaginous penicillin directly into the segmental bronchus involved is described. Dramatic results are shown in 10 patients.

The method is also useful for "poor-risk" patients of chronic suppurative bronchopneumonitis prior to definitive surgery.

11:55 a.m.

Practical Testing of Pulmonary Function in the Cardio-Respiratory Laboratories of St. Michael's Hospital, Newark

Thomas J. Ormsby, M.D., Assistant, Medical Service, St. Michael's Hospital, Newark

A compact pulmonary function unit is described. Also shown is the St. Michael's Hospital Laboratory report form for pulmonary function studies. The maximum breathing capacity test is demonstrated.

12:10 p.m.

Film: Technique of Fluoroscopy of the Chest

Paul K. Bornstein, M.D., Asbury Park Attending in Medicine, Fitkin Memorial Hospital, Neptune, and

Irving J. Selikoff, M.D., Associate in Medicine, Barnert Memorial Hospital, Paterson

General practitioners are making increasing use of fluoroscopy. A short film is here presented which demonstrates normal fluoroscopy technic. Also shown is the application of the modern image intensifier, and certain new technics in fluorophotography.

1:00 p.m.

Luncheon of Section on Chest Diseases and New Jersey Chapter, American College of Chest Physicians

Embassy Room, Lounge Floor

SECTION ON DERMATOLOGY

Morris H. Saffron, M.D., Chairman, Passaic
Cedric C. Carpenter, M.D., Secretary, Summit

Room 105, First Floor

10:00 a.m.

Recent Advances in Dermatologic Therapy

Marcus T. Block, M.D., Chief Dermatologist, American Legion Hospital, Newark

Discussor: John R. Tobey, M.D., Newark

This discussion reviews antibiotics in pustular eruptions and the rapid treatment of syphilis; antifungicides in the mycoses: stilbenes; antihistamines; depigmenting and pigmenting agents; antimalarials; enzymes: hormones: cortisone, hydrocortisone, fluorohydrocortisone, ACTH, acthgel, estrogens; rauwolfia, chlorpromazine, hypnosis; vitamins; isoniazid, cathode rays, grenz rays, thorium X; selium, sodium sulfacetamide: entsufon with hexachlorophene; and protective ointments.

10:30 a.m.

Psychosomatic Factors in Tension Dermatitis

Morris H. Saffron, M.D., Director of Dermatology, St. Mary's Hospital, Passaic

Discussor: John W. Kinley, M.D., Summit

The development of the theory of emotional factors in pruritis dermatoses is reviewed. Typical reactions are outlined. Case histories are discussed. In the light of Selye's contributions the terms "tension dermatitis" or "stress dermatitis" are suggested to replace "neurodermatitis."

11:00 a.m.

Business Session

11:15 a.m.

The Role of the Endocrine Glands in Dermatology

Rita S. Finkler, M.D., Chief Emeritus, Department of Endocrinology, Beth Israel Hospital, Newark

Many endocrine diseases can be diagnosed by typical alterations in the skin, such as, hypertrophic skin changes in acromegaly, purple striae and plethora in pituitary basophilism; hypertrichosis, pigmentation and acne in Cushing's syndrome; skin edema or dry skin and alopecia in hypothyroidism; brown pigmentation in Addison's disease and Albright's syndrome; atrophic skin changes in menopausal disturbances and others. This presentation will be illustrated with color photography.

1:00 p.m.

Luncheon of Section on Dermatology and New Jersey Dermatological Society

Room 122, First Floor

SECTION ON GASTRO-ENTEROLOGY AND PROCTOLOGY

URBAN R. FINNERTY, M.D., Chairman, Montclair
BENJAMIN J. MACCHIA, M.D., Secretary, Jersey City

Room 125, First Floor

10:00 a. m.

Modern Treatment of Peptic Ulcer

Harry Shay, M.D., Professor of Clinical Medicine, Director Fels Research Institute, Temple University School of Medicine, Philadelphia, Pa.

Discussor: Samuel M. Gilbert, M.D., Newark

Ideal medical management of peptic ulcer could be achieved if we could produce and maintain enough gastric anacidity to reduce peptic activity to a minimum. Without acid and pepsin activity there would be no peptic ulcers. Psychovisceral influences are important. There are physiologic pathways in man through which these influences deleteriously affect the ulcer patient. Diet and pharmacologic agents and their physiologic basis directed to treatment of the known factors involved in ulcer will be discussed.

10:30 a. m.

Symposium on Divertioulitis: Interpretation of Radiographic Findings

Carl Knitzer, M.D., Clinical Assistant, Department of Roentgenology, Mountainside Hospital, Montclair

This paper discusses the types of diverticula, their frequency and sites within the large bowel; roentgen criteria and findings; the problem of differential diagnosis, particularly as concerns carcinoma.

Differential Diagnosis and Medical Management

Theodore S. Heineken, M.D., Bloomfield, Attending Physician and Chief of Gastro-Enterology Clinic, Mountainside Hospital, Montclair

Diverticulitis is not an uncommon finding in diverticulosis. It occurs in one out of every four cases. The diagnosis is discussed including differential diagnosis from cancer. The treatment is presented. Treatment of choice is a combination of mineral oil, anti-spasmotics and sulfa drugs with a low-residue diet. What not to do with diverticulitis is reviewed. The success of these procedures is illustrated by case histories and slides.

Surgical Indications and Procedures

Christopher A. Beling, M.D., Associate Director of Surgery, St. Vincent's Hospital, Montclair

This is a brief review of the indications for surgery in diverticulitis. The methods of attack are spelled out.

11:30 a. m.

Business Session

11:45 a. m.

The Management of Ischio-anal Abscess and Fistula-in-ano

Richard A. Hopping, M.D., East Orange, Attending Proctologist, St. Barnabas Hospital, Newark

Stressing the practical points of the subject.

SECTION ON GENERAL PRACTICE

MORRIS A. MONALOY, M.D., Chairman, Passaic
Louis K. Collins, M.D., Secretary, Glassboro

Venetian Room, Lounge Floor

10:00 a. m.

Enuresis

Bernard D. Pinck, M.D., Attending Urologist, Beth Israel Hospital, Passaic

Discussor: Stanley Gerson, M.D., Paterson

Faulty urinary control in children is of functional origin in 82 per cent of cases. In the other 18 per cent, the enuresis is partly or wholly attributable to organic causes. Treatment begins with classification into the proper category. It is guided by comprehension of the physiologic processes involved. Where indicated thorough urologic survey will eliminate months of irresponsive treatment. With certain children, psychiatric assistance is imperative. Medical management is often helpful. Where uropathy exists, conservative surgical treatment is sometimes necessary. The desired result is total control and not the transformation of the enuretic into a nocturic. Newer drugs and mechanical devices are considered.

10:30 a.m.

The Role of the General Practitioner in Arthritis and Rheumatic Diseases

Jacob Heyman, M.D., Newark, Instructor in Clinical Medicine, New York University Postgraduate Medical School, New York, N. Y.

Discussor: Samuel C. Yachnin, M.D., Passaic

Arthritis and rheumatism are the most prevalent chronic illnesses in the United States. They are twice as frequent as heart disease, seven times commoner than cancer, and ten times more frequent than tuberculosis or diabetes. The physician can do much to reduce this impressive toll of disability.

Newer forms of therapy will be subjected to critical assay, and emphasis placed on troublesome disabilities which yield readily to simple principles of diagnosis and treatment.

11:00 a.m.

Business Session

11:15 a.m.

Rehabilitation of the Patient with Coronary Artery Disease

Jerome G. Kaufman, M.D., Attending in Medicine, Beth Israel Hospital and Martland Medical Center, Newark

Discussor: Kalman Chase, M.D., Hohokus

Patients with coronary artery disease should be helped to return to gainful employment as soon as feasible. Work records indicate that these cardiac patients make an excellent adjustment, are good workers and have a low rate of absenteeism. Following early return to work they are less prone to emotional instability.

SECTION ON OTOLARYNGOLOGY

Robert F. Roh, M.D., Chairman, East Orange
Baxter H. Timberlake, M.D., Secretary, Atlantic City

Room 110, First Floor

10:00 a.m.

Symposium on the Common Cold

William B. Nevius, M.D., Attending Pediatrician, East Orange General Hospital, East Orange

The important role that the control and treatment of respiratory infections assume in a private pediatric practice is stressed.

Prevention of respiratory infections will be discussed: early recognition, isolation, diet, correction of anemia, recognition of sinus infection, removal of diseased tonsils and adenoids, vaccine therapy, and antibiotic prophylaxis.

The newer antibiotics in the treatment of this type of infection will be fully reviewed. It is the opinion of the speaker that a grave injustice is done to those children who are acutely ill and from whom antibiotics are withheld.

Joseph R. Jehl, M.D., Attending Pediatrician and Allergist, St. Joseph's Hospital, Paterson

The speaker will report observations of allergy to foods and inhalants which, he believes, lay the foundation of the common cold.

James F. Gleason, M.D., Assistant Chief of Medicine, Atlantic City Hospital, Atlantic City

The cause and treatment of the common cold will be reviewed from the viewpoint of the internist. Therapeutic measures to be discussed include symptomatic therapy, antihistamines and antibiotics. Purely medical complications will also be reviewed.

Floyd J. Putney, M.D., Attending Otolaryngologist, Jefferson Medical College Hospital, Philadelphia, Pa.

Local treatment of the common cold is needed to prevent sinusitis, otitis media and laryngitis. Patients complaining of frequent colds or of a continuous nasal discharge present problems in etiology. The complaint of cold may be due to infection; it may also be secondary to allergy or a combination of the two.

11:45 a.m.

Mobilization of the Fixed Stapes Footplate to Restore Hearing in Otosclerosis — An Analysis of Results

Samuel Rosen, M.D., Consulting Otologist, Mt. Sinai Hospital, New York, N. Y.

This presents a new, simple and short procedure by which the fixed stapedial footplate is rendered mobile with restoration of hearing. The operation is done under local anesthesia through an ear speculum. With a fine instrument, pressure is made against the neck of the stapes until the footplate is mobilized. In a large proportion of cases useful hearing and sometimes normal hearing results. Successful cases (up to three years) are reported. After manipulation of the stapes the drum is replaced. The patient leaves the hospital within 24 hours after the operation.

12:15 p.m.

Business Session

SECTION ON RADIOLOGY

NICHOLAS G. DEMY, M.D., Chairman, Plainfield
CARYE-BELLE HENLE, M.D., Secretary, Newark

Room 118, First Floor

10:00 a. m.

The Role of the Isotope Clinic in the Practice of Medicine

Louis J. Levinson, M.D., Associate Attending Radiologist, Beth Israel Hospital, Newark

Discussors: Frank Burstein, M.D., Newark
Samuel Penchansky, M.D., Bayonne

The author describes recently developed diagnostic and therapeutic applications of radioactive isotopes. Colored slides illustrate both the technics and the results. Radio-iodine, radio-gold phosphorus and radioactive strontium are reviewed. Since some of the isotopes can be utilized only in a hospital, the organization and personnel of an isotope clinic are detailed. The role of the isotope clinic as a teaching and clinical research center will also be stressed.

10:40 a. m.

The Possible Hazards in the Use of Radiologic Equipment in the Private Practitioner's Office

Benjamin P. Sonnenblick, Ph.D., Associate Professor of Biology, Rutgers University, Newark

Discussor: Benjamin Copleman, M.D., Perth Amboy

With increasing use of radiation in medicine, research and industry, exposure must be kept to the lowest possible level. Admonitions have long been directed toward fluoroscopic procedures, despite the "softness" of the radiations concerned. That pertinent teachings are widely disregarded was recently ascertained by the writer and three associates in a survey of the roentgen output of 63 fluoroscopes, and of the operator's activities, in New Jersey. The observations were disquieting. A further investigation of 56 more machines in two states was undertaken. Results from the new samples are similar to those originally obtained.

Physicians vary decidely in the use of protective equipment for themselves. Almost all were completely unaware of the x-ray output of their instruments. Many did not realize the necessity for calibration. The dose received by the child or adult patient seems merely fortuitous. Any unnecessary increment of radiation received by the gonads should also be viewed with some misgiving.

11:15 a. m.

Business Session

11:30 a. m.

Unusual Manifestations of Trauma in Infancy and Childhood

Andrew P. Dedick, Jr., M.D., Assistant Radiologist, Riverview Hospital, Red Bank

Discussor: Martin A. Quirk, M.D., Red Bank

Traumatic lesions, as depicted on films in infancy and early childhood are frequently misinterpreted. Many morbid diagnoses are made, causing worry both to physicians and parents. Selected cases will be presented to call attention to the different appearance of trauma in infancy and childhood as compared with that in later life.

GENERAL SESSION ON OBSTETRICS AND GYNECOLOGY

HERSCHEL S. MURPHY, M.D., Chairman, Roselle
FELIX H. VANN, M.D., Secretary, Englewood

Venetian Room, Lounge Floor

2:30 p. m.

Recent Advances in the Treatment of Medical Complications of Obstetrics and Gynecology

Treatment of Diabetes

Priscilla White, M.D., Physician, Joslin Clinic, Boston, Mass.

The management of the obstetrical diabetic patient consists of seven equally important parts: (1.) classification for fetal risk; (2.) female sex hormonal therapy; (3.) control of diabetes; (4.) correction of edema and hydramnios; (5.) early timing of the delivery; (6.) special care of the infant in the post-delivery period; and (7.) re-evaluation of the child forever after. Following the inauguration of these methods, the viable fetal mortality rate fell to 10 per cent, toxemia incidence to 3 per cent and pre-viable losses to 9 per cent.

Treatment of Heart Disease — Especially Rheumatic

Harold Gorenberg, M.D., Cardiologist, Margaret Hague Maternity Hospital, Jersey City

A system of management of heart disease in pregnancy is outlined. Evidence shows that abortion is unnecessary and cesarean section not indicated. Competent management reduces the inroads made upon the cardiac reserve during pregnancy to the point where decompensation and death are rarities. Pregnancy is shown to be only a temporary complication of heart disease. There is nothing to suggest that the heart is damaged by childbearing or that the course of the rheumatic process is thereby accelerated.

Treatment of Tuberculosis

Joseph A. Smith, M.D., Medical Director, New Jersey Sanatorium for Chest Diseases, Glen Gardner

Tuberculosis in the female in child-bearing years continues to be one of the leading causes of death. It need not be. Interruptions of pregnancy when a diagnosis of tuberculosis is established is *not* indicated. But intensive treatment is indicated. Pregnancy should be continued under close supervision by a cooperative team of obstetrician and phthisiologist. Prognosis of the tuberculosis is unaltered by pregnancy. The prognosis of tuberculosis is altered only by the treatment or lack of it.

Treatment of Toxemia

Leon C. Chesley, Ph.D., Associate Professor of Obstetrics and Gynecology, State University of New York College of Medicine, Brooklyn, N. Y.

The author reviews the physiologic basis for the use of hypotensive drugs in selected cases of toxemia, with remarks as to some of their shortcomings. An account is rendered of work in progress on the use of magnesium sulfate.

General Discussion

4:30 p. m.

Business Session

GENERAL SESSION ON MEDICINE

PETER J. WARTER, M.D., Chairman, Trenton
STEWART F. ALEXANDER, M.D., Secretary, Park Ridge

Venetian Room, Lounge Floor

2:30 p. m.

The Usable Isotopes in Every Day Practice

Samuel V. Geyer, M.D., Radiologist, Hahnemann Medical College and Hospital, Philadelphia, Pa.

The use of radioactive iodine in the diagnosis of thyroid function is reviewed. An explanation will be given of scintigraphic recording of thyroid gland outline, followed by radioiodine therapy for hyperthyroidism, intractable cardiac conditions and thyroid carcinoma. Other uses of radioactive iodine will be mentioned. The uses of radioactive phosphorus and gold will be discussed.

2:55 p. m.

Use and Abuse of Anti-Coagulants

Hilton S. Read, M.D., Director, Ventnor Diagnostic Center, Atlantic City

No final opinion to the use of anti-coagulants in coronary occlusion has been reached. Some schools insist that they use them in every case, others do not use them at all. The type of anti-coagulant and length of its use is also a moot question. We are, therefore, presenting our own experiences and our own opinion.

3:20 p. m.

A Preliminary Report on Meticorten (Metacortandracin)

Herman H. Tillis, M.D., Chief of Arthritis, Presbyterian and Beth Israel Hospitals, Newark

Co-Author: Lester M. Goldman, M.D., Director of Laboratories, Beth Israel Hospital, Newark

This is a preliminary report on four patients with rheumatoid arthritis who have been failures on all previous therapy including cortisone and hydrocortisone. Their progress and laboratory changes for a three month period are reported.

3:45 p. m.

Business Session—all members are requested to remain for this session and participate

3:55 p. m.

Sarcoidosis

H. A. Weiner, M.D., Chief, Medical Service, Veterans Administration Hospital, East Orange

Observation on some aspects of systemic sarcoidosis.

4:20 p. m.

The Recognition of Hemolytic Anemia

Martin Epstein, M.D., Consultant in Internal Medicine, New Jersey State Hospital, Trenton

This presentation re-emphasizes the need for considering hemolysis as a cause of anemia in cases not obviously due to iron deficiency. Once an awareness is developed, this etiology may be established with greater frequency. A review of the technics involved in establishing the presence of hemolysis is offered, along with succinct case histories and color slides.

4:40 p. m.

Present Concepts in the Use of Hypotensive Drugs

Frederick K. Heath, M.D., Department of Clinical Investigation, Merck & Co., Rahway

The author reviews factors in hypertension including hereditary, psychogenic, neurogenic, and renal. The rationale of drugs used to modify these factors is then discussed.

Discussion will be conducted from the floor by the general membership. Each paper will be discussed immediately following its presentation. Discussion limited to five minutes.

Wednesday Morning, April 20, 1955

SECTION ON CARDIOVASCULAR DISEASES

HAROLD K. EYNON, M.D., Chairman, Camden
ROBERT B. DURHAM, M.D., Secretary, Atlantic City

Venetian Room, Lounge Floor

9:30 a.m.

A Survey of 211 Consecutive Cases of Myocardial Infarction with Emphasis on the Shoulder-Arm-Hand-Pectoral Syndrome

Edwin N. Murray, M.D., Attending Physician and Associate Cardiologist, Cooper Hospital, Camden

General Discussion

This survey deals with the decompensation, pericarditis, aerophagia, emphysema, perforated ventricular wall, and perforated interventricular septum—occurring in the series. It discusses the involvement of the mid-line by coronary pain; the sedimentation rate and the incidence of elevated blood pressure with coronary attacks. The etiology, diagnosis, and treatment of the shoulder-arm-hand-pectoral syndrome are emphasized.

10:10 a.m.

The Diagnostic and Prognostic Evaluation of Systolic Murmurs

Henry B. Kirkland, M.D., Medical Director, Prudential Insurance Company of America, Newark

General Discussion

Summarizes current clinical concepts of the significance of systolic cardiac murmurs, emphasizing the importance of careful analysis of auscultatory observations. Data from a large actuarial study are presented to illustrate the correlation of clinical impressions with insurance statistics. Conclusions are drawn about the prognosis of various types of systolic murmurs.

11:05 a.m.

Extra Cardiac Factors in the Comprehensive Management of the Cardiac Patient

Peter H. Marvel, M.D., Northfield, Chief of Medicine, Shore Memorial Hospital, Somers Point, and

Robert B. Durham, M.D., Cardiologist, Atlantic City Hospital, Atlantic City

General Discussion

The authors emphasize the importance of paying attention to extra cardiac factors when treating patients with heart disease. The following often overlooked conditions are stressed in comprehensive management: (1) Anemia, nutrition, and avitaminosis (2) Refractory failure (3) The thyro-cardiac relationship (4) Hepatic insufficiency (5) Obesity (6) Psychosomatic relationship—(increased energy output—stress and adaptation).

Special attention is given to the overall clinical management and not to the heart *per se*.

11:45 a.m.

Business Session

SECTION ON CLINICAL PATHOLOGY

THOMAS K. RATHMELL, M.D., Chairman, Trenton
WILLIAM T. READ, JR., M.D., Secretary, Camden

Room 105, First Floor

10:00 a.m.

Remarks

Thomas K. Rathmell, M.D., Chairman, Section on Clinical Pathology, Trenton

10:15 a.m.

Adrenal Hyperfunction — Diagnosis and Management of Certain Syndromes

Louis J. Soffer, M.D., Attending Physician and Head of Endocrinology, Mt. Sinai Hospital, New York, N. Y.

General Discussion

This is a study of 40 patients with Cushing's syndrome, dealing with clinical manifestations, laboratory data, x-ray diagnosis, and treatment.

11:00 a.m.

Adrenal Cortical Hyperplasia and Its Association with Diabetes Mellitus and Degenerative Vascular Disease

Sylvan E. Moolten, M.D., Director, Department of Pathology, St. Peter's General and Middlesex General Hospitals, New Brunswick

General Discussion

Adrenal cortical hyperplasia is not uncommon at autopsy. Hypertensive disease, diabetes mellitus, obesity and intercapillary glomerulosclerosis are not uncommonly associated with it. Indirect evidence suggests that adrenal cortical hyperfunction may play an important part in the development of the "degenerative diseases," particularly when diabetes is also present. The latter, however, may be conditioned by hyperfunction of the pituitary, in which adrenal cortical hyperfunction plays

merely a contributory role. Considerations are offered which may provide a useful approach to the prevention and amelioration of these conditions, especially the vascular and renal complications which are more serious in the outcome of diabetes than the abnormality in sugar metabolism.

11:45 a. m.

Business Session

12:30 p. m.

Luncheon of Section on Clinical Pathology and New Jersey Society of Clinical Pathologists

Room 105, First Floor

SECTION ON METABOLISM

Otto Brandman, M.D., Chairman, Newark
James F. Gleason, M.D., Secretary, Ventnor

Room 125, First Floor

9:30 a. m.

The Problem of Obesity

Garfield G. Duncan, M.D., Clinical Professor of Medicine, Jefferson Medical College, Philadelphia, Pa.

Obesity predisposes to diabetes, atherosclerosis, coronary insufficiency, and hypertension with a shortened life expectancy. Overweight patients seldom follow through on a wisely planned reduction program. Public Health programs (including high school instruction) making overweight unpopular are recommended.

Corrective measures include: (1) Hospitalization in refractory cases (2) Reduced caloric intake — alternating maintenance and low calorie days — with supplementary vitamin therapy (3) Revision of dietary customs (4) Planned exercises (5) Close supervision (6) Correction of emotional predisposing factors and furnishing motive for reduction.

10:00 a. m.

Insulin in Clinical Medicine

William Nyiri, M.D., Attending Physician, Metabolic Service, Martland Medical Center, Newark

The paper reviews the various uses of insulin in the treatment of diabetes mellitus and its complications. Criteria of insulin treatment, the commercially available insulins, including the new insulin lente, and their combined use, insulin reactions, -resistance, -allergy, and -lypodystrophy are discussed. The paper also reviews the administration of insulin in acidosis, infections, surgery, pregnancy, cardiovascular lesions, and children.

10:30 a. m.

Business Session

10:45 a. m.

Extra-Pancreatic Diabetes

Herbert S. Kupperman, M.D., Adjunct Assistant Professor of Medicine, New York University College of Medicine, New York, N. Y.

Extra-pancreatic factors are not infrequently of clinical significance in the etiology and management of diabetes mellitus. The role of the pituitary and adrenal cortex in decreased glucose tolerance is discussed. Also described is the effect of the administration of pituitary and adrenal cortical hormones upon carbohydrate tolerance in normal individuals and in diabetics. The diagnostic procedures needed to evaluate extra pancreatic factors in diabetes mellitus are described.

11:15 a. m.

Hepatic Coma in Portal Cirrhosis

Victor A. Bressler, M.D., Assistant, Medical Clinic, Atlantic City Hospital, Atlantic City

General Discussion

Hepatic coma complicating portal cirrhosis is discussed. The unusual clinical and biochemical liability of precoma and comatose patients is re-emphasized. The doubtful therapeutic "specificity" of agents such as cortisone, adrenocorticotropic hormone, glutamic acid, and certain antibiotics, is re-examined.

12:30 p. m.

Luncheon of Section on Metabolism and Medical Members of the New Jersey Diabetes Association

Room 125, First Floor

SECTION ON NEUROPSYCHIATRY

EVELYN P. IVEY, M.D., Chairman, Morristown
WILLIAM FURST, M.D., Secretary, East Orange

9:30 a.m.

Modern Therapies in Neuropsychiatry

Medical and Pharmacological Aspects of Treatment in Psychiatry

Internist: Elmer L. Severinghaus, M.D., Nutley, Clinical Professor of Medicine, New York Medical College, New York, N. Y.

Excluding methods of so-called "shock therapy," attention is given to sedative or hypnotic drugs, to analeptics, and to anticonvulsant materials. The occasions to use drugs with more specific effects on certain structures, (such as those used for the tension and tremor of parkinsonism) is mentioned. Attempts to effect favorably disturbances of mood are presented.

Physiological

Neuropsychiatrist: David J. Impastato, M.D., Associate Neuropsychiatrist, University Hospital, New York, N. Y.

Shown in outline form, are the factors to be considered before selecting a particular psychiatric treatment. The presently available biologic psychiatric treatments are reviewed. The author describes photic stimulation, A.C. and unidirectional convulsive therapy, focal, focal spread, monopolar technics, and various forms of non-convulsive therapy including a modified form of deep coma therapy. Barbiturate and succinyl choline tests and their administration in both electric and metrazol convulsions are detailed. Indications and results are given.

Current Trends in Psychotherapy

Emil A. Gutheil, M.D., Director of Education, Postgraduate Center of Psychotherapy, New York, N. Y.

The paper surveys the trends in psychotherapy during the past 50 years. It covers the psychologic, physiologic and philosophical background of modern psychotherapy and its impact on general medicine. It also discusses the question as to whether (and to what extent) the general practitioner can use psychotherapy in his practice.

Neurosurgical Aspects

Walter G. Scheuerman, M.D., Assistant Neurosurgeon, St. Francis Hospital, Trenton

Five psychosurgical procedures are in use today: standard lobotomy, topectomy, selective cortical undercutting, trans-orbital leukotomy and thalamotomy. These procedures aim to cut only those areas which have to do with affect and emotions and to prevent the side effects of personality blunting, memory loss and loss of judgment. Agitated schizophrenics, obsessive-compulsives and manic-depressives are helped. Psychosurgery is indicated only when all other forms of treatment have failed.

11:45 a.m.

Business Session

12:30 p.m.

Luncheon of Section on Neuropsychiatry
Room 122, First Floor

SECTION ON OPHTHALMOLOGY

WILLIAM H. HAHN, M.D., Chairman, Newark
JOSEPH R. WEINTROB, M.D., Secretary, Atlantic City

Room 110, First Floor

9:30 a.m.

Vascular Disease in Ophthalmology

Moderator: William H. Hahn, M.D., Chairman

The Role of Blood in Vascular Accidents

William G. Bernhard, M.D., Pathologist, St. Barnabas Hospital, Newark

The role of the blood constituents as a cause of thromboembolism and other vascular complications in ophthalmology is discussed. Also reviewed is the relative value of certain laboratory procedures (such as red blood counts, hemoglobin estimation, hematocrit and blood volume determinations) in the polycythemic syndrome or "sludging" of blood in ocular surgery.

General Aspects of Vascular Disease

Camille Mermod, M.D., Attending Physician, St. Barnabas Hospital, Newark

Abnormalities affecting ophthalmic circulation may be roughly divided into: (1) Infections attacking the blood vessels proper or causing secondary changes in them (2) Vascular abnormalities preventing properly oxygenated blood from reaching the eyes (3) Structural changes in the vessel walls resulting in partial or complete obstruction of blood flow.

This last type is encountered most frequently in clinical practice and is usually due to the sclerotic changes of atherosclerosis and arteriolar sclerosis.

Neurologic Manifestation of Vascular Disease

Thomas S. P. Fitch, M.D., Attending Neurosurgeon, Muhlenberg Hospital, Plainfield

Frequent neurologic vascular syndromes (often not recognized by the ophthalmologist) are discussed. A brief anatomic and pathologic review of these syndromes is presented. Also reviewed are the more recent advances in arteriographic visualization of vascular disturbances of the brain and the practical use of optokinetic reflexes.

An attempt is made to arouse the interest of ophthalmologists to carry out a few simple neurologic tests which may assist them in determining the presence of certain vascular lesions of the brain.

Ocular Changes in Vascular Disease

Isaac S. Tassman, M.D., Professor of Clinical Ophthalmology, Graduate School of Medicine, University of Pennsylvania, Philadelphia, Pa.

The author details the distinguishing features of ocular changes occurring in the course of some of the more important vascular diseases. Also discussed is the relationship of the changes in the retinal vessels and retina to the other clinical manifestations of these diseases. An attempt is made to correlate some of the recently described histopathologic evidences in the retinopathies with the clinical course of some of these diseases.

11:30 p. m.

Business Session

12:30 p. m.

Luncheon of Section on Ophthalmology

Room 110, First Floor

SECTION ON RHEUMATISM

Walter R. Edwards, M.D., Chairman, Trenton

R. Winfield Betts, M.D., Secretary, Medford

Room 118, First Floor

9:30 a. m.

New Developments in Hormone Therapy of Rheumatic Diseases

Edward Henderson, M.D., Editor-in-chief, Journal of the American Geriatrics Society, Montclair

General Discussion

The first major change in the molecular structure of cortisone resulting in a drug with high anti-inflammatory activity was 9-fluoro hydrocortisone. While this is highly active (and in much smaller doses than is cortisone or hydrocortisone) side effects have mitigated against its use in the systemic treatment of rheumatic disease. Recently discovered is the addition of a double bond between carbon 1 and carbon 2 in the A-ring of the cortisone structure. The resulting compound, metacortandracin (Meticorten), has been carefully studied in several hundred cases of rheumatic disease. This study shows that Meticorten is three to four times more potent than cortisone or hydrocortisone. It does not cause retention of sodium or loss of potassium. Relief of pain and swelling is prompt and gratifying.

9:55 a. m.

Helpful Information in the Diagnosis of Various Types of Arthritis

L. Maxwell Lockie, M.D., Professor of Therapeutics and Head of Department of Therapeutics, University of Buffalo, Buffalo, N. Y.

General Discussion

To select the treatment for arthritis, it is necessary to establish promptly the type of arthritis. It is first necessary to do a complete physical examination, with certain laboratory and x-ray studies. Much useful information is obtained quickly through other channels. Helpful hints make this task easier so that the great advances in treatment can be carried out when the complete study is available. The author makes many suggestions in the diagnosis of rheumatoid arthritis, rheumatoid spondylitis, osteoarthritis, gouty arthritis and psoriatic arthritis. In most instances, a diagnosis can be made within a few minutes.

10:30 a. m.

Business Session

10:45 a. m.

The Painful Lower Back

Clarence B. Whims, M.D., Chief of Medicine, Atlantic City Hospital, Atlantic City

General Discussion

The "Low Back Syndrome" has become a diagnostic problem to nearly every branch of medicine and surgery. It represents the major complaint of many patients. Helpful in arriving at an accurate diagnosis and instituting proper therapy is the fact that most cases will fit into one or the other of these two categories: (1) Static pain, which by definition, comes with use and is relieved by rest; or (2) Episodic ache which, as the name implies, presents itself in acute attacks, sudden in nature and occurring two or three times a year.

11:10 a. m.

Management of Rheumatoid Arthritis

Emmerson Ward, M.D., Rheumatologist, Mayo Clinic, Rochester, Minn.

Treatment of rheumatoid arthritis is directed mainly toward relief of symptoms, preservation or restoration of articular function, and general supportive measures. The program includes occupational therapy, physical therapy, physical and mental rest, simple analgesics, protection of joints from overuse and from malposition, optimal nutrition, orientation of the patient to the nature of his disease and its treatment, therapy for other medical conditions; cortisone and related hormones, and gold salts. The author discusses the inter-relationships between these programs. Indications for and details of these programs are considered.

12:30 p. m.

Luncheon of Section on Rheumatism

Room 118, First Floor

SECTION ON UROLOGY

George W. Irmisch, M.D., Chairman, Trenton
Emmet J. Connell, M.D., Secretary, Jersey City

22 Club, Lobby Floor

9:30 a. m.

Studies in Male Infertility—Review of 206 cases from 1950-53 with discussion of types of therapy

Irving Maisel, M.D., Assistant in Genito-Urinary, Beth Israel Hospital, Newark

Male infertility (216 cases) was studied in the last 4 years. The technic of seminal fluid examination is discussed. Methods of treatment for oligospermia are evaluated including small and large doses of testosterone, x-ray stimulation of the pituitary and small and large doses of gonadotropins. The value of testicular biopsy and treatment of chronic prostatitis is discussed.

The best outlook seems to be with the use of large doses of gonadotropins. This was launched during the last year and is mentioned only briefly at this time. The overall measure of success came to 9 per cent.

9:45 a. m.

Transurethral Prostatic Surgery

Gershom J. Thompson, M.D., Chief of Urology, Mayo Clinic, Rochester, Minn.

The scope of application of transurethral surgery for disease of the prostate gland is much wider than is commonly realized. This is the preferred method of removing the benign gland and (in all but few cases) partial resection combined with hormone therapy is best for malignant lesions. Also discussed are other types of prostatic disorder including congential deformities, acute and chronic inflammations, calculous disease, sclerosis and contracture and granulomatous infiltration.

10:15 a. m.

Retrocaval Ureter—Review of literature with presentation of a case

Irving Lerman, M.D., Attending Urologist, Elizabeth General and St. Elizabeth Hospitals, Elizabeth

Co-Authors: Samuel Lerman, M.D., Associate Attending Urologist, Elizabeth General Hospital, Elizabeth, and Frederick Lerman, M.D., Assistant Attending Urologist, Elizabeth General Hospital, Elizabeth

Discussor: Michael Spirito, M.D., Elizabeth

The diagnosis of retrocaval ureter is made roentgenographically. There are no pathognomic clinical signs or symptoms. The syndrome is of sufficient frequency so that it should be considered in any unilateral hydronephrosis. The importance of radiographic investigation for any urinary abnormality is stressed.

Etiology, diagnosis, and treatment are reviewed. Two cases are presented which show various factors in diagnosis and management.

10:30 a. m.

Business Session

10:45 a. m.

Hematuria

Lloyd B. Greene, M.D., Professor of Clinical Urology, Graduate School of Medicine, Philadelphia, Pa.

This is a survey of 1200 patients admitted to a hospital on the Urologic Service. While not a disease, hematuria is the most common urologic symptom. Hemorrhagic cystitis is discussed. Also reviewed is radiation cystitis. Uncontrollable bleeding from the kidney may demand nephrectomy as a life saving measure, but it is rarely indicated. The term "essential hematuria" should be discarded. Problems in management are described.

Wednesday Morning, April 20, 1955

11:15 a. m.

Permanent Diversion of the Urinary Stream (illustrated)

John K. deVries, M.D., East Orange, Attending Urologist, Orange Memorial Hospital, Orange

In December 1952 questionnaires were sent to the 1500 members of the American Urological Association to obtain a consensus on permanent diversion of the urinary stream. Weight of opinion shows 72 per cent in favor of external diversion. Of external forms of drainage nephrostomy and ureterocutaneous ureterostomy are equally popular. Ureterostomy and pyelostomy are rarely used. Slides illustrating types of cases are shown.

Wednesday, Afternoon, April 20, 1955

GENERAL SESSION ON SURGERY

George N. J. Sommer, Jr., M.D., Chairman, Trenton
Salvatore Giordano, M.D., Secretary, Morristown

12:30 p. m.

Luncheon of Section on Surgery and New Jersey Chapter, American College of Surgeons

Embassy Room, Lounge Floor

Scientific Session

22 Club, Lobby Floor

2:00 p. m.

The Primary Treatment of the Seriously Injured Patient

James H. Mason, IV, M.D., Assistant Surgeon, Atlantic City Hospital, Atlantic City

Discussor: Wayne H. Stewart, M.D., Cape May Court House

Mechanization and, in particular, the increase in number and horsepower of automobiles in this age has brought about an increase in the number of severely injured. (War or other disaster might provide a large number of such cases at any time.) The paper is a resumé of methods useful in the resuscitation of cases of severe trauma likely to be seen in the hospital emergency ward. A logical plan is offered for the primary treatment of these cases.

2:20 p. m.

Experiences with Burns in a New Jersey Hospital

Merton L. Griswold, Jr., M.D., Associate Attending Surgeon, Muhlenberg Hospital, Plainfield

Discussor: Jerome Gelb, M.D., Newark

This is a study of burn injuries in a three year period at the Muhlenberg Hospital in Plainfield. The plan and course of treatment are outlined. Emphasis is placed on mortality, optimum time for grafting, methods of grafting and disability. A few cases have been selected for analysis; and by means of slides, their progress from date of burn to discharge, is illustrated.

2:40 p. m.

The Place of Antibiotics and Chemotherapy in the Treatment and Prevention of Surgical Infections

William R. Sandusky, M.D., Associate Professor of Surgery, University of Virginia School of Medicine, Charlottesville, Va.

Discussor: Douglas B. Stevens, M.D., Princeton

3:15 p. m.

Business Session

3:25 p. m.

The Selection of a Suitable Operation for a Duodenal Ulcer

Stanley O. Hoerr, M.D., Surgeon, Cleveland Clinic, Cleveland, Ohio

Discussor: Earl A. O'Neill, M.D., Plainfield

After it has been determined that a patient requires an operation for an intractable duodenal ulcer, the surgeon must weigh: (1) Safety (2) Undesirable side effects of surgery, and (3) Nutrition. In either the "poor risk patient" or in the patient who presents a very difficult technical problem at the time of surgery, a vagotomy with gastroenterostomy should be done. In patients whose ulcer symptoms are not very pronounced, the possibility of severe side effects such as the "dump syndrome" should be recalled. The surgeon thus fits the procedure to the patient rather than trying to make one operation fit every individual.

4:00 p. m.

The Early Treatment of Injuries to the Facial Structures

Arthur W. von Deilen, M.D., Chief of Plastic Surgery, West Jersey Hospital, Camden

After extensive injuries to the face (by the instrument panel gadgets of the modern automobile and breaking of windshields) the first thought should be directed toward the treatment of shock, blood loss and respiratory difficulty. The second thought should be directed toward doing what can be done at that time with safety to insure a final cosmetic result acceptable to the patient. A little early treatment is sometimes worth more than months of later reconstruction.

HOUSE OF DELEGATES

President, Elton W. Lance, M.D., Rahway

Parliamentarian, Henry A. Davidson, M. D., Cedar Grove

Secretary, Marcus H. Greifinger, M.D., Newark

Sergeants-at-Arms, Benjamin F. Lee, M.D., Camden
Joseph M. Gannon, M.D., Plainfield

The Committee on Credentials will meet at the Registration Desk each morning of the meeting.

SESSIONS

First Session: 2:00 p.m., Sunday, April 17, 1955

1. Call to Order
2. Invocation
   Rev. Harvey Bennett, D.D., The First Presbyterian Church, Atlantic City
3. Organization of House of Delegates
4. Transactions of 1954 Annual Meeting
5. Introduction of Guests and Delegates from Other States
6. Annual and Supplemental Reports
7. New Business
8. Announcements
9. Open Discussion on Medical-Surgical Plan

Second Session: 12:30 p.m., Monday, April 18, 1955

1. Report of Nominating Committee
2. Election

Third Session: 9:30 a.m., Tuesday, April 19, 1955

1. Reports of Reference Committees
2. Unfinished Business
3. Installation of Incoming President
4. Adjournment

NOMINATING COMMITTEE

Sunday Evening, April 17, 1955

8:30 p. m.

Board Room, Lobby Floor

Chairman, Henry B. Decker, Immediate Past-President

County	*Delegate*	*Alternate*
Atlantic	David B. Allman	G. Ruffin Stamps
Bergen	G. Barton Barlow	Frederick G. Dilger
Burlington	R. Winfield Betts	E. Vernon Davis
Camden	Frank J. Hughes	Edmund C. Hessert
Cape May	Herschel Pettit	Millard Cryder
Cumberland	Carl N. Ware	Mary Bacon
Essex	Marcus H. Greifinger	William W. Cox
Gloucester	Louis K. Collins	Baxter A. Livengood
Hudson	James F. Lynch	John J. Bedrick
Hunterdon	Lloyd A. Hamilton	Arthur M. Jenkins
Mercer	D. Leo Haggerty	Samuel Blaugrund
Middlesex	John H. Rowland	Edward F. Klein
Monmouth	Daniel F. Featherston	Louis F. Albright
Morris	F. Clyde Bowers	Stanley Teskey
Ocean	Raymond A. Taylor	William E. Dodd
Passaic	Joseph R. Jehl	Sandor A. Levinsohn
Salem	C. Spencer Davison	Harry W. Fullerton
Somerset	George E. Barbour	Runkle F. Hegeman
Sussex	Dorsett L. Spurgeon	Robert A. Weinstein
Union	Lorrimer B. Armstrong	Louis S. Wegryn
Warren	Ralph M. L. Buchanan	Vincent A. Burell

Offices to be Filled by Election

April 1955

Office	*Term*	*From*		*To*		*Incumbent*
President-Elect	1 year	April	1955	May	1956	Vincent P. Butler, M.D. Jersey City
First Vice-President	1 year	April	1955	May	1956	Lewis C. Fritts, M.D. Somerville
Second Vice-President	1 year	April	1955	May	1956	Albert B. Kump, M.D. Bridgeton
Secretary	1 year	April	1955	May	1956	Marcus H. Greifinger, M.D. Newark
Treasurer	1 year	April	1955	May	1956	Jesse McCall, M.D. Newton
Trustees:						
4th District	3 years	April	1955	May	1958	C. Byron Blaisdell, M.D. Asbury Park
5th District	3 years	April	1955	May	1958	Carl N. Ware, M.D., Shiloh
11th Trustee	3 years	April	1955	May	1958	Royal A. Schaaf, M.D. Newark
Councilors:						
3rd District	3 years	April	1955	May	1958	Jacob J. Mann, M.D. Perth Amboy
A.M.A. Delegates:	2 years	January	1956	December	1957	William F. Costello, M.D. Dover
	2 years	January	1956	December	1957	Aldrich C. Crowe, M.D. Ocean City
	2 years	January	1956	December	1957	NEW—(6th delegate earned by having A.M.A. membership of over 5,000 on December 31, 1954)
A.M.A. Alternates:	2 years	January	1956	December	1957	Albert B. Kump, M.D. Bridgeton
	2 years	January	1956	December	1957	VACANT—(vacancy created by death of Dr. Walter F. Phelan of Elizabeth)
	2 years	January	1956	December	1957	NEW—(6th alternate earned by having A.M.A. membership of over 5,000 on December 31, 1954)
Delegates and Alternates to Other States:						
New York						
Delegate	1 year	April	1955	May	1956	Harrold A. Murray, M.D. Newark
Alternate	1 year	April	1955	May	1956	William F. Costello, M.D. Dover
Connecticut						
Delegate	1 year	April	1955	May	1956	C. Byron Blaisdell, M.D. Asbury Park
Alternate	1 year	April	1955	May	1956	Blackwell Sawyer, M.D. Toms River
Standing Committees:						
Publication	3 years	April	1955	May	1958	Joseph E. Mott, M.D. Paterson

REFERENCE COMMITTEES

Monday Morning, April 18, 1955
10:00 a.m.

Reference Committee "A"

Room 102, First Floor

Reports of the:
- President
- Board of Trustees
- Secretary
- Judicial Council
- Executive Officer

Edward G. Waters, Chm.	Hudson County
Jack E. Shangold	Middlesex County
George M. Brooks	Cape May County
H. Hale Hollingsworth	Passaic County
Dorsett L. Spurgeon	Sussex County

Reference Committee "B"

Room 103, First Floor

Reports of the:
- Treasurer
- Finance and Budget Committee
- Publication Committee
- Medical Defense and Insurance Committee
- Medical Education Committee

Francis M. Clarke, Chm.	Middlesex County
Baxter H. Timberlake	Atlantic County
Harry Taff	Essex County
Noah Meyerson	Hudson County
John J. Laurusonis	Gloucester County

Reference Committee "C"

Room 108, First Floor

Reports of the:
- Medical Service Administration
- Medical-Surgical Plan

Albert F. Moriconi, Chm.	Mercer County
Samuel M. Diskan	Atlantic County
William M. Golden	Union County
John J. Flanagan	Essex County
Harry R. Brindle	Monmouth County

Reference Committee "D"

Room 107, First Floor

Reports of the Special Committees on:
- Emergency Medical Service, Civil Defense
- Medical Research
- Medical School
- Physicians Placement Service

Henry J. Konzelmann, Chm.	Union County
R. Winfield Betts	Burlington County
Arthur M. Jenkins	Hunterdon County
Francis P. Carrigan	Essex County
John L. Olpp	Bergen County

Monday Afternoon, April 18, 1955
2:00 p.m.

Reference Committee "E"

Room 102, First Floor

Reports of the:
- Welfare Committee
- Special Committees of the Welfare Committee
- Subcommittees of the Welfare Committee
- Special Committees of the Subcommittees

Winton H. Johnson, Chm.	Bergen County
Michael W. Spirito	Union County
Harry W. Fullerton, Jr.	Salem County
Joseph R. Jehl	Passaic County
Nicholas A. Bertha	Morris County

Reference Committee on Constitution and By-Laws

Room 103, First Floor

Amendments to the Constitution

Amendments to the By-Laws

Mary Bacon, Chm.	Cumberland County
R. John Cottone	Mercer County
Graham C. Newberry	Union County
William E. Dodd	Ocean County
Josiah C. McCracken, Jr.	Atlantic County

Reference Committee on Miscellaneous Business

Room 107, First Floor

Reports of the:
- Annual Meeting Committee
- Subcommittee on Scientific Program
- Subcommittee on Scientific Exhibit
- Dates and Places of Future Annual Meetings
- Advisory Committee to the Woman's Auxiliary

Louis F. Albright, Chm.	Monmouth County
George Matheke	Essex County
John S. Madaras	Hudson County
Ralph M. L. Buchanan	Warren County
Edmund C. Hessert	Camden County

Reference Committee on Resolutions and Memorials

Room 116, First Floor

Report of the Honorary Membership Committee

Nominations for Emeritus Membership

Resolutions

Memorials

Harry N. Comando, Chm.	Essex County
Samuel Blaugrund	Mercer County
Runkle F. Hegeman	Somerset County
Robert N. Bowen	Camden County
F. Clyde Bowers	Morris County

Reference Committee on Credentials will meet at the Registration Desk each morning of the meeting.

Frank J. Hughes, Chm.	Camden County
Marcus H. Greifinger, Ex-Officio	Secretary
Jesse McCall, Ex-Officio	Treasurer

Woman's Auxiliary
To The Medical Society of New Jersey

TWENTY-EIGHTH ANNUAL MEETING

Sunday, April 17, 1955

10:00 a. m.—Registration Opens
Lounge Floor

6:30 p. m.—Fellowettes' Dinner
(For Fellowettes only)
Room 105, First Floor

Monday, April 18, 1955

10:00 a. m.—Registration; Breakfast, Luncheon, and Dinner Tickets
Lounge Floor

1:00 p. m.—Pre-Convention Board Meeting
Surf Room, Lounge Floor

3:30 p. m.—Tea
Room 125, First Floor
All physicians' wives are cordially invited.

8:30 p.m.—General Session of the 189th Annual Meeting of The Medical Society of New Jersey
Renaissance Room, Lounge Floor
The members of the Woman's Auxiliary are invited to attend.

Tuesday, April 19, 1955

9:30 a. m.—Registration; Breakfast, Luncheon, and Dinner Tickets
Lounge Floor

9:00 a. m.—General Session
Surf Room, Lounge Floor

1. Invocation
   Rev. Arthur McKay Ackerson, All Saints Episcopal Church, Atlantic City
2. Pledge of Loyalty to the Woman's Auxiliary to the American Medical Association
   Mrs. Frank S. Forte, Immediate Past-President
3. Welcome
   Mrs. Max Gross, President, Woman's Auxiliary to the Medical Society of Atlantic County
4. Response
   Mrs. Andrew C. Ruoff, President-Elect
5. Memorial Service for Departed Members
   Mrs. Richard J. McDonald, Fellowette
6. Convention Announcements
   Mrs. Harry Subin, Chairman
7. Reports

12:30 p. m.—Luncheon
Embassy Room, Lounge Floor

Honoring Mrs. Paul E. Rauschenbach, President

Presiding
Mrs. William E. Dodd

Greetings
Elton W. Lance, M.D., President, The Medical Society of New Jersey

Guest Speaker
Mrs. George Turner, President, Woman's Auxiliary to the American Medical Association

Presentation of President's Pin
To: Mrs. Paul E. Rauschenbach, President
By: Mrs. Frank S. Forte, Immediate Past-President

2:30 p. m.—General Session (continued)
Surf Room, Lounge Floor

8. Reports and Discussion
9. Report of Nominating Committee
10. Election of Officers for 1955-56

7:00 p. m.—Dinner-Dance
Renaissance Room, Lounge Floor

Honoring President and Mrs. Elton W. Lance of The Medical Society of New Jersey

Wednesday, April 20, 1955

9:00 a. m.—Inaugural Breakfast
Surf Room, Lounge Floor

Speaker
Vincent P. Butler, M.D., President-Elect, The Medical Society of New Jersey

10:00 a. m.—Post-Convention Board Meeting
Surf Room, Lounge Floor

Mrs. Andrew C. Ruoff, presiding

There will be an instruction session for new State Officers, Chairmen, and County Presidents immediately following the Post-Convention Board Meeting.

12:00 noon—President's Luncheon for Incoming County Presidents
Room to be announced

Mrs. Andrew C. Ruoff, Hostess

SCIENTIFIC EXHIBITS

Lounge Floor

Exhibit Hours: 9:00 a.m. - 5:00 p.m., Monday and Tuesday, April 18 and 19, 1955;
9:00 a.m. - 3:00 p.m., Wednesday, April 20, 1955.

Booth 1. Testing the Drinking Driver. Committee on Medico-Legal Problems, American Medical Association; and Committee on Chemical Tests for Intoxication, National Safety Council; under the auspices of the Committee on Medical Research, The Medical Society of New Jersey; and the Division of Motor Vehicles, State Department of Law and Public Safety.

Three-dimensional figures portray (1) progressive degrees of intoxication (2) amount of alcohol required to produce different states of drunkenness, and (3) the corresponding portions of the brain anesthetized by the ingestion of alcohol.

Life-like, actual size, reproductions of the brain are colored to show the areas affected in various states of intoxication. The proportion of blood alcohol for each stage is also shown. This exhibit also displays several devices and methods for testing the drinking driver.

Booth 2. The Surgical Correction of Mitral and Aortic Valvular Lesions. Charles P. Bailey, M.D., Houck E. Bolton, M.D., William L. Jamison, M.D. and Henry Nichols, M.D., Bailey Thoracic Clinic and Hahnemann Hospital, Philadelphia, Pa.

Charts and transparencies show the pathogenesis of each lesion. They display pertinent historical data, the surgical concepts, the technic, the operative results and follow-up data on our patients. Roentgenograms and physiologic data are also presented.

Booth 3. Stenotic Valvular Heart Disease—Results of Surgery. Robert P. Glover, M.D., Thomas J. E. O'Neill, M.D., O. Henry Janton, M.D., J. C. Davila, M.D. and Robert G. Trout, M.D., Philadelphia, Pa.

During the past six years intracardiac surgery has passed from the exploratory, experimental stage into an accepted specialty with wide application. Any heart valve when in a state of stenosis, can be opened technically. During this period the authors have studied and operated upon well over 1,000 cases. More than 75 per cent of patients have shown definite improvement, in many instances of great magnitude. Overall operative mortality has been less than 7 per cent.

This exhibit depicts the pathology of the lesion and the technic of the operative approach. It emphasizes the results of such surgery together with pre-operative evaluation and postoperative management. Charts, photographs and drawings illustrate the data.

Booth 4. The Solitary Round Dense Pulmonary Lesion, Diagnosis and Management. Samuel Cohen, M.D. and Frank Bortone, M.D., B. S. Pollak Hospital for Chest Diseases, Jersey City.

This exhibit is concerned with patients (not known to have tuberculosis) seen for the first time with a solitary round dense pulmonary lesion on chest x-ray. The patients are observed for a period of time. One reason for urgency of diagnosis and treatment in these cases is that a high proportion of these shadows later prove to be malignant. Diagnostic tools and proper management are emphasized. Cases are shown in which pulmonary resection was done. The pathologic findings are presented.

Booth 5. Management of Ureteral Calculi. Maxwell Malament, M.D., Irving Maisel, M.D. and Leonard H. Talarico, M.D., Veterans Administration Hospital, East Orange.

A short outline of the management of ureteral calculi with x-ray films of illustrative cases and various types of catheters used for extraction of calculi. For demonstration purposes, a moulage of the bladder and ureter will be exhibited.

Booth 6. Functional Uterine Bleeding. Rita S. Finkler, M.D., Edward Diamond, M.D. and Sylvia F. Becker, M.D., Beth Israel Hospital, Newark.

This display is based on an analysis of 160 cases of functional uterine bleeding on an endocrine basis. Most of the subjects had been hospitalized for a diagnostic curettage. Several patients in this group had also been subjected to major surgery. Patients with demonstrable pelvic organic pathology or malignancy were not included. The exhibit consists of 9 charts illustrated by tables, black and white photographs of actual cases and colored microphotographs illustrating abnormal endometrial patterns and ovarian pathology. One chart describes therapy and another summarizes the findings.

Booth 7. Oral Mercurial Neohydrin®—Clinically Effective Without Renal Toxicity. William A. Leff, M.D. and Harvey L. Nussbaum, M.D., St. Barnabas Hospital, Newark.

This is a three year clinical study of 50 patients who had taken the oral mercurial Neohydrin® with effective diuresis to maintain fluid balance, and who had not shown any evidence of mercurial toxicity. All patients showed evidence of myocardial failure. Each had received at least one injection of Mercuhydrin® weekly (prior to taking the oral mercurial) for one to five years. During this three year period the total dosage of the oral mercurial ranged from 14,000 to 32,000 milligrams without any signs or symptoms of renal pathology.

Neohydrin® was clinically effective and showed no toxic effects upon the kidney.

Booth 8. Physical Medicine and Rehabilitation—An Avenue to Functional Living and Independence. Charles R. Brooke, M.D., Veterans Administration Hospital, East Orange.

Shown here is a graphic orientation to the philosophy and methods of the physical medicine and rehabilitation process in the re-establishment of the optimum functional living capacity, and in the care and treatment of the sick, injured, and disabled, as applied to general practice. It displays representative methods used in both chronic and acute problems. The exhibit highlights the fact that physical medicine and rehabilitation goals are realistic when equated in terms of living values; that this is a profitable investment because the tax *user* becomes a tax *payer*. Also described are ways in which the rehabilitative process, in properly selected cases, can be accomplished at home in conjunction with a physiatrist if available, the family physician and local agencies. The doctor is strategically placed to serve as coordinator.

Booth 9. Congenital Anomalies of the Pulmonary Circulation. Nathaniel Finby, M.D., and Israel Steinberg, M.D., The New York Hospital, Cornell Medical Center, New York, N. Y.

Conventional and angiocardiographic radiographs are used to illustrate congenital anomalies of the pulmonary circulation. These anomalies include: (1) Malformations of a branch of the pulmonary artery, such as aneurysm and stenosis (2) maiformations of a branch of the pulmonary artery, such as absent main branch pulmonary artery and agenesis of a lung (3) pulmonary arteriovenous fistulae (4) alteration of pulmonary circulation, as in patent ductus arteriosus, anomalous insertion of pulmonary veins and anomalous aortic circulation to the lung, and (5) certain complex cardiovascular anomalies like the tetralogy of Fallot and Eisenmenger's complex.

Booth 10. Improved Adrenal Denervation for Essential Hypertension. Sherman A. Eger, M.D., Jefferson Medical College, Philadelphia, Pa.

This exhibit introduces an improved method of adrenal denervation and reports its effects in 10 cases of essential hypertension.

Emphasis is placed on the need for assurance that all the nerves to each adrenal are completely severed before surrounding the gland with Oxycel cotton (oxidized cellulose). Although absorbable, this produces a fibrous tissue barrier impenetrable to regenerating nerves. Here is a method which produces definite and lasting changes in the adrenals accompanied by a lessening of the neurogenic element in essential hypertension and its symptoms.

Booth 11. Clinical Effects of a New Steroid (Meticorten®) in Intractable Rheumatoid Arthritis. John W. Gray, M.D., Evelyn Z. Merrick, M.D. and Edward Henderson, M.D., Hospital Center, Orange, and St. Barnabas Hospital, Newark.

This is a study of 50 patients with special reference to intractable rheumatoid arthritis. Many showed inadequate response to other forms of therapy. In some there were undesirable effects from cortisone and its analogues. It is shown that Meticorten® is more effective than cortisone, hydrocortisone, and ACTH, and that no undesirable side effects were observed.

Booth 12. Surgery of the Aortic Arch. Victor P. Satinsky, M.D., Eugene V. Kompaniez, M.D., Joshua Fields, M.D. and Claudius N. Shropshire, Jr., M.D., Temple Hospital, Los Angeles, Calif.

The etiology, symptomatology, pathology, and treatment of aneurysms of the arch of the aorta are depicted. Emphasis is on management and on a new technic for the transplantation of the entire arch.

Booth 13. Mediastinal Tumors. W. Emory Burnett, M.D., George P. Rosemond, M.D., H. Taylor Caswell, M.D., Robert M. Bucher, M.D., R. Robert Tyson, M.D. and Vincent W. Lauby, M.D., Temple University School of Medicine and Hospital, Philadelphia, Pa.

Here is a pictorial exhibit in black and white of the common and uncommon mediastinal tumors. Cards give a history of each case with photographs of a pre-operative x-ray, of the operative specimen and a photomicrograph of the microscopic slide. These include some unusual lesions, which are impossible to diagnose pre-operatively. The display is so constructed that the viewer may check his own diagnosis. Also displayed is a diagrammatic drawing in color of the mediastinum showing the usual locations of the lesions.

Booth 14. Electrocardiographic T Wave Changes and Arteriosclerotic Heart Disease. Royal S. Schaaf, M.D., Charles E. Kiessling, M.D., and A. M. Lyle, F.S.A., Prudential Insurance Company, Newark.

A group of individuals showing non-specific T wave changes on electrocardiographic examination, without other signs of cardiovascular disease, have been followed for a number of years. An evaluation of the entire group is presented relative to the subsequent development of arteriosclerotic heart disease.

Booth 15. Audiologic Evaluation and Speech Rehabilitation. Herbert E. Rickenberg, M.A., Director, Henry C. Barkhorn Memorial Hearing and Speech Clinic, Newark Eye and Ear Infirmary; under the auspices of the Committee on Hearing and Speech, The Medical Society of New Jersey.

This illustrates the importance of proper audiologic evaluation to prescribe the hearing aid which gives maximum benefit. Such evaluation also helps in initiating corrective rehabilitative procedures with children with auditory disorders. Also exhibited is a demonstration of rehabilitation with severely hard of hearing children.

Booth 16. Focal Pulmonary Hemosiderosis in Rheumatic Heart Disease. Michael J. Esposito, M.D. and John A. Evans, M.D., The New York Hospital, Cornell Medical Center, New York, N. Y.

Focal deposition of hemosiderin in the lungs may occur in patients with mitral stenosis. At times this is severe enough to create a widespread granular pulmonary infiltration radiographically.

Analysis of 100 cases of rheumatic heart disease coming to autopsy disclosed 28 histologic examples of focal hemosiderosis; in 5 cases the foci were plainly evident on the roentgenograms.

The results of this study, including a summary of the clinical, radiologic, and pathologic findings, are presented. Illustrations include the actual roentgenograms, as well as colored transparencies depicting the gross and microscopic lung changes.

The condition is not as rare as heretofore believed.

Booth 17. The Chronic Illness Law. Daniel Bergsma, M.D., M.P.H., Commissioner, New Jersey State Department of Health, and William H. Hahn, M.D., Chairman, Committee on the Chronically Ill, The Medical Society of New Jersey.

Here illustrated are some of the "first" projects of the State Health Department initiated or expanded in community hospitals and other local agencies by providing diagnostic equipment, personnel, training courses, pilot studies, and advisory services. This is a cooperative effort of the New Jersey State Department of Health and The Medical Society of New Jersey.

Booth 18. Differential Diagnosis of Pulmonary Disease. American Trudeau Society and National Tuberculosis Association under the auspices of Joseph A. Smith, M.D., Superintendent, New Jersey Sanatorium, Glen Gardner.

This free-standing display includes chest x-ray plates, drawings and text to show possible diagnoses of an unidentified pulmonary lesion shown on an x-ray plate. An audience-participation device permits physicians to identify and study causes of lesions appearing in a selected group of chest x-rays.

Booth 19. Estrogen Lotion Treatment for Chronic Acne Vulgaris. Irving Shapiro, M.D., Newark.

Topical application of an estrogenic lotion in chronic severe acne will induce a remission and curb recurrences in a high proportion of cases in both sexes. Charts, "before and after" photographs, and tables are presented.

The advantages of direct local administration of estrogen are: (1) High concentration of estrogen on target area (2) flexible dosage control (3) rare side effects with proper dose (4) compatibility with other therapy (5) acceptability to both sexes (6) effectiveness in both sexes, and (7) high degree of effectiveness in the most resistant types of acne.

Booth 20. Moniliasis in Infants and Children. Bohdan Dobias, M.D., Babies Hospital, Newark.

Various types of moniliasis of skin and mucous membranes and their incidence in infants and children are demonstrated. Color transparencies illustrate results of treatment with a new antifungal agent, Mycostatin.®

Booth 21. Permanent Diversion of the Urinary Stream. John K. deVries, M.D., Summit Medical Group, Summit.

This exhibit consists of charts and photographs of x-rays. It is based on a questionnaire which had been sent to the 1500 members of the American Urological Association to obtain a consensus on permanent diversion of the urinary stream. The tally shows 72 per cent in favor of external diversion. Of external forms of drainage, nephrostomy and ureterocutaneous ureterostomy are equally popular. Ureterostomy and pyelostomy are rarely used.

Booth 22. Infectious Mononucleosis, The Blood Count, Heterophile Antibody Agglutination with Guinea Pig and Sheep Cell Absorption Tests. Milton R. Bronstein, M.D. and Arthur S. Dicker, B.S., M.S., Edison.

The varied early blood picture in infectious mononucleosis has brought to light certain abnormalities which aid in diagnosis and treatment. The need for refinement in diagnosis has shown the need for the guinea pig and sheep cell adsorption to omit Forssmann Antibodies, in addition to the Heterophile Antibody Agglutination Test. In discussing the changes from normal blood counts, 28 cases showing the abnormally high "stab cell" count early with a definite 3 to 4 phase distinct hematologic categories are presented.

Booth 23. Syphilis is Still Here. Daniel G. Melvin, M.D. and C. Archie Crandell, M.D., New Jersey State Hospital, Greystone Park; and Albert Abraham, M.D., Morristown.

This exhibit reflects the incidence of central nervous system syphilis in patients at a State Hospital. It compares the current problem with the situation in the pre-antibiotic period. Special attention is given to the problem of cardiovascular syphilis in this patient group.

Booth 24. Importance of Time in Cancer of the Lung. The American Cancer Society, New Jersey Division, Inc., under the auspices of the Special Committee on Cancer Control of The Medical Society of New Jersey.

"Even as an untouched hour-glass steadily measures its term, so does neglect of cancer inexorably drain out the chance for life."

Booth 25. Unusual Tumors in Childhood. Harold W. Dargeon, M.D., The Children's Tumor Registry, Memorial Hospital for Cancer and Allied Diseases, New York, N. Y.

The diagnostic and therapeutic problems of tumors of children are often simple enough. Certain cases, however, present the clinician, surgeon, radiologist, pathologist with major difficulties. Illustrative cases are exhibited. Among these are: adrenal cancer and melanoma in a 4½ year old boy; duplication of lower ileum and entire colon in a 7½ year old girl; malignant reticuloendotheliosis in a male, age 11½ years; medulloblastoma and reticuloendotheliosis in a 3½ year old boy.

Booth 26. Effect of Oxysteroids on the Inhibitory Action of Antibiotics on Cultures of Bacteria and Endamoeba Histolytica. Harry Seneca, M.D., and Ellen Bergendahl, College of Physicians and Surgeons, Columbia University, New York, N. Y.

Oxysteroids have no inhibitory effect on cultures of bacteria and endameba histolytica. They do not depress the inhibitory effect of tetracycline group on bacteria and endameba histolytica, but they markedly depress the inhibitory effect of penicillin, streptomycin and a penicillin-streptomycin combination. Penicillin with oxytetracycline has an inhibitory effect on bacteria. This is not influenced by oxysteroids, but is moderately depressed by Compound S on Ps. aeruginosa, S. typhi and Proteus. Doca moderately enhances, while hydrocortisone and cortisone mildly enhance the inhibitory effect of neomycin on bacterial cultures. Compound S depresses the inhibitory effect of neomycin. Oxysteroids mildly depress the inhibitory effect of polymyxin on bacteria; but have no effect on the action of carbomycin except in the case of Brucella.

Booth 27. Nitrous Oxide-Nisentil Anesthesia for Major and Minor Sugery. Irving M. Riffin, M.D., St. Vincent's Hospital, Montclair.

This exhibit shows that a "light" anesthesia consisting of 75 per cent nitrous and Nisentil® can be used for a major surgery, i.e. gastrectomy and cholecystectomy, as well as in the entire gamut of minor surgery. The exhibit shows the step-by-step administration of nitrous oxide potentiated with Nisentil®, plus the use of succiny choline for intermittent relaxation. The advantages of a "light" anesthetic, and the occasional difficulties of the technic are also presented.

Booth 28. Registry of Medical Technologists. The New Jersey Society of Medical Technologists under the auspices of the New Jersey Society of Clinical Pathologists.

This display shows requirements for certification, registration, and places of employment.

Booth 29. Complete Medical Audit. Graham C. Newbury, M.D. and Gladys Bohrman, Overlook Hospital, Summit.

A complete medical audit of all admissions of all staff members for the fiscal year. The audit is conducted by the record committee, the audit and normal tissue committee, and the record librarian. It is then tabulated and analyzed by a physician not connected with the staff or hospital, following which the audit is sent to the joint advisory committee, executive committee, and staff sections for examination and necessary action.

TECHNICAL EXHIBITS

Lounge Floor

Exhibit Hours: 9:00 a.m. - 5:00 p.m., Monday and Tuesday, April 18 and 19, 1955;
9:00 a. m. - 3:00 p.m., Wednesday, April 20, 1955

Booth 1. W. B. Saunders Company, Philadelphia. Among the newest Saunders titles on display will be: *Current Therapy* 1955; Allen, Barker & Hines, *Peripheral Vascular Diseases* (2d edition); Green & Richmond, *Pediatric Diagnosis*; Campbell, *Urology;* Deutschberger, *Fluoroscopy in Diagnostic Roentgenology;* Greenhill, *Obstetrics* (11th edition); and Shackelford, *Bickman-Callander's Surgery of the Alimentary Tract.*

Booth 2. Pfizer Laboratories, Brooklyn. Terramycin Intramuscular, Cortril, Bonamine and Tyzine will be the highlights this years of a star-studded cast including the complete line of tested and proved Terramycin dosage forms, Tetracyn, the latest broad spectrum antibiotic and the *Steraject* line of injectable Penicillin and Combiotic preparations.

Booth 3. Hoffmann-La Roche, Inc., Nutley. Noludar is a new, *non-barbiturate* hypnotic which provides effective relief of insomnia and tension states. It is so well tolerated that such side effects as nausea, vomiting, and dizziness, are rarely, if ever, experienced with therapeutic doses. Noludar is available in scored tablets of two strengths: 50 milligrams and 200 milligrams, and in a cordial-flavored elixir, 50 milligrams per teaspoonful.

Booth 4. P. Lorillard Company, New York. P. Lorillard Company, manufacturers of *Old Gold* Cigarettes as well as *Briggs* Pipe Mixture and other famous tobacco products, will exhibit and demonstrate their *Kent* Cigarettes with the exclusive Micronite Filter.

Booth 5. Burroughs Wellcome & Co., (U.S.A.) Inc., Tuckahoe, N. Y. New 'Wellcome' brand Solution of Digoxin for Injection. With this Digoxin, no dilution is required. It is serviceable for both intramuscular and intravenous use.

Digoxin 'B. W. & Co.' is also available in tablet form for oral digitalization.

'Neosporin' brand Polymyxin B — Bacitracin — Neomycin — and Antibiotic Ointment, for the treatment of topical bacterial infections with minimal risk of sensitization.

'Marezine' Hydrochloride brand Cyclizine Hydrochloride—Oral. This is for the prevention and treatment of nausea and vomiting of pregnancy, motion sickness and vertigo. It is also available *for injection* in postoperative vomiting.

Booth 6. Desitin Chemical Company, Providence, R. I. Desitin ointment is the pioneer in external cod liver oil therapy. It is indicated for diaper rash, slow healing wounds, burns of all degrees, lacerations, hemorrhoids and fissures.

Desitin powder is a unique, dainty medicinal powder saturated with cod liver oil.

Desitin hemorrhoidal suppositories are made with cod liver oil. Each suppository coats the ano-rectal area with soothing, lubricating cod liver oil. It gives prompt relief of pain and it allays itching.

Desitin lotion is the original cod liver oil lotion. It is soothing, protective, mildly astringent and healing, in non-specific dermatitis, pruritis, poison ivy, and so forth.

Booth 7. Lederle Laboratories Division, Pearl River, N. Y. You are cordially invited to visit our exhibit where you will find our representation prepared to give you the latest information on Lederle products.

Booth 8. R. J. Reynolds Tobacco Company, Winston-Salem, N. C. You are cordially invited to receive a cigarette case (monogrammed with your initials) containing your choice of Camel, Cavalier King Size, or Winston, the distinctive new king size, filter cigarette.

Booth 9. A. H. Robins Company, Inc., Richmond, Va. The A. H. Robins Company display features the comprehensive analgesics Phenaphen and Phenaphen with Codeine (¼, ½ or 1 grain); Allbee with C. Capsules providing saturation dosage of water-soluble vitamins, including 250 milligram ascorbic acid; the antirheumatic Pabalate and the Donnatal extended action tablets, Donnatal Extentabs.

Booth 10. U. S. Vitamin Corporation, New York. Our exhibit will feature C.V.P., a water-soluble, more active citrus flavonoid compound (vitamin P complex) potentiated by vitamin C. This has been found to be highly effective clinically . . . proved by more than 2000 cases thus far reported . . . in increasing capillary resistance and checking bleeding due to capillary fragility in hypertension, diabetes, purpura, uterine bleeding, post-surgical bleeding and other hemorrhagic conditions. It has also been found valuable in controlling symptoms and reducing fever in the common cold, influenza, pharyngitis, tonsillitis and certain respiratory infections. Professional samples and literature on C.V.P. and other of our nutritional specialties will be distributed at our booth.

Booth 11. The Doho Chemical Corporation, New York. Auralgan is the ear medication for the relief of pain in otitis media and for the removal of cerumen.

New Otosmosan is the effective, non-toxic ear medication. It is fungicidal and bactericidal (Gram negative-Gram positive) in suppurative and aural dermatomycotic ears.

Rhinalgan is the nasal decongestant which is free from systemic or circulatory effect and equally safe to use on infants as well as the aged.

The Mallon Chemical Corporation, Subsidiary of the Doho Chemical Corporation, is also featuring Rectalgan, the liquid topical anesthesia, also for relief of pain and discomfiture in hemorrhoids, pruritus and perineal suturing.

Booth 12. Gerber Products Company, Fremont, Michigan. *When milk is contraindicated* as the basic food for infants, Gerber's Meat Base Formula can provide a nutritionally adequate replacement. It is well accepted and tolerated by infants of all ages. Your Gerber detailman invites you to evaluate Meat Base Formula and the complete line of supplementary baby foods. You are also invited to review new editions of Gerber's baby care and adult special diet booklets. Each is designed especially for distribution by physicians. Each provides non-controversial information in simple, easy-to-understand language. The service is complimentary.

Booth 13. Eli Lilly and Company, Indianapolis. The Lilly display will contain information on recent therapeutic developments. Lilly sales people will be in attendance. They welcome your questions about Lilly products.

Booth 14. Ciba Pharmaceutical Products, Inc., Summit. This exhibit will feature Serpasil, a pure crystalline Rauwolfia alkaloid possessing the essential antihypertensive actions of the whole root. Serpasil offers mild, gradual, sustained lowering of blood pressure with a slowing of the heart rate; a tranquilizing effect beneficial in most cases of hypertension; and unvarying potency.

Booth 15. The Purdue Frederick Company, New York. The Purdue Frederick Company welcomes you to their presentation of Pre-Mens, for relief of entire complex syndrome of premenstrual tension; Colpotab, therapeutic vaginal insert tablet for trichomonas, vaginal pruritis, leukorrhea, and malodorous lesions. Colpotab contains a combination of drugs including the most effective trichomonacidal antibiotic tyrothricin which provides maximum results with fewest side effects; and Chlorogicne Duchettes, esthetically acceptable hygienic douche and adjunctive therapy in vaginal infections. Representatives from our Medical Department will be happy to discuss with you technical and scientific aspects of our products and to provide you with recently published scientific reports and clinical trial supplies of these medicinals.

Booth 16. Lynn Pharmacal Co., Camden. Lynn Pharmacal cordially invites you to pause a few moments at Booth 16. We feel you will be interested in seeing Rabudex, Mephenamide, Inj-Cynaplex and our new, smooth acting Quadsed, a quadruple barbiturate designed to control tension peaks more effectively.

Booth 17. Baby Service, Inc., Newark. New Jersey's largest diaper service will again be on hand to greet the members, their wives and guests. The usual "Baby Service Rose" will be given to each lady. Representatives will explain and show pictures of Baby Service's new modern plant. Over 40,000 square feet of sunshine clean, sanitary space devoted exclusively to the washing of diapers. The exhibit will also feature diaper service for hospital and home with full explanation of the scientific reasons for the safety and superiority of Baby Service.

Booth 18. The Coca-Cola Company, Atlanta. Ice-cold Coca-Cola will be served through the courtesy and cooperation of the Coca-Cola Bottling Company, Atlantic City and The Coca-Cola Company.

Booth 19. Clark & Clark, Wenonah. Profetamine Phosphate Chewing Gum containing 10 milligrams of monobasic amphetamine phosphate, racemic, and 5 and 10 milligram tablets; the central nervous stimulant of choice. U. S. Patent No. 2,507,468.

Clarkotabs—Improved. This is the original Triple Formula Obesity preparation containing Profetamine Phosphate.

Samples and literature are available. Stop by and see us.

Booth 20. Warner-Chilcott Laboratories, New York. A new cardiovascular agent will be featured at the Warner-Chilcott booth. This is Methium with Reserpine, a hypotensive-sedative, to lower blood pressure and relieve hypertensive symptoms. Peritrate to prevent attacks in angina pectoris and Parsidol, for the control of symptoms in parkinsonism, will also be exhibited. Representatives and research personnel will welcome an opportunity to discuss these drugs with you.

Booth 21. Abbott Laboratories, North Chicago. Abbott Laboratories will display Erythrocin, the antibiotic of wide range activity against "coccal" organisms; Tronothane, Abbott's new non-"caine" topical anesthetic; Blutene, the non-hormonal oral drug for treatment of functional uterine bleeding; Covicone Protective Skin Cream for protection against certain contact dermatoses; and Sucaryl, a non-caloric sweetener which has no aftertaste and is useful for diabetic and weight reducing diets. Numerous other Abbott products—nutritional supplements, antibiotics, antihistamines—will also be exhibited.

Booth 22. Cameron Surgical Specialty Company, Chicago. Cameron means electrically-lighted instruments at their best—electro-surgical units from which most others are copied, and service unequalled. We are the originators of the first real Radio Knife. New items this year include an instrument for taking biopsy specimens in orifices or through sigmoidoscope or bronchoscope tubes and coagulating the base at the same time without destroying the specimen. A brand new blood pressure machine that is operated without the use of a stethoscope and with which one records the pressures on a small graph. It operates electronically—weighs one pound. New stainless steel rectal instruments by Dr. George Becker. The flexible esophagoscopes.

Booth 23. Encyclopaedia Britannica, Inc., Philadelphia. The big new 1955 Edition of *Encyclopaedia Britannica, The Unabridged Encyclopaedia Britannica World Atlas, The Britannica World Language Dictionary,* together with two ten-year services of great importance and value, will be offered on a special exhibit basis, to members of The Medical Society of New Jersey during the 189th Annual Meeting.

Booth 24. The Harrower Laboratory, Inc., Jersey City. The exhibit of The Harrower Laboratory, Inc. includes two products of interest in obstetrical practice. Calcisalin is a phosphorus-free prenatal supplement, formulated on the concept that phosphorus and calcium should not be combined within one formula because phosphorus depresses the assimilation of calcium. Also included is Prometic, a clinically proved new therapeutic agent for nausea and vomiting of pregnancy.

Booth 25. The Mennen Company, Morristown. The Mennen Company will exhibit Baby Magic Skin Care—America's favorite baby lotion, famous Baby Oil and Baby Powder—for anti-diaper rash protection; in addition, Mennen Quinsana — the fast-acting foot powder that kills athlete's foot germs painlessly.

Booth 26. J. B. Roerig and Company, Chicago. Physicians and their friends are cordially invited to visit the Roerig booth where there will be highlighted the Company's preparations, some of which Roerig has pioneered and established for them a wide acceptance in the medical profession. Roetinic, the new one-a-day capsule hematinic for all anemias amenable to oral therapy. Bonadoxin, for the prevention of nausea and vomiting of pregnancy and post-operatively. ASF, Roerig's new anti-stress formula and Vi-Thyro for the activation and vitalization of the thyroid gland. Also available will be Viterra, Viterra Therapeutic, Amplus, Obron, Obron Hematinic and Heptuna. Plus. Samples and literature are available on all products including adequate amounts for clinical trial.

Booth 27. Lissco Medical Company, Inc., Newark. An exhibitor for many years, we invite the members of the Medical Society to visit our booth and view the new items added to our line.

Booth 28. The Stuart Company, Chicago.

Booth 29. Mead Johnson & Company, Evansville, Ind. Mead Johnson & Company invite you to see new displays of Liquid Lactum and Powdered Lactum, the infant formula products with balanced caloric distribution. Also featured in the Mead booth will be Liquid Sobee, a hypoallergenic (milk-free) soya formula; Natalins, the smaller prenatal vitamin-mineral capsules; Natalins-T, for the treatment of anemias of pregnancy plus protective nutritional support; and Sustagen, the complete food for tube or oral feeding.

Booth 30. Sharp & Dohme, Inc., Philadelphia. The many indications for Hydrocortone or Cortone highlight the therapeutic importance of these hormones in everyday practice. A new anesthetic agent Cyclaine Hydrochloride with qualities suitable for such forms of regional anesthesia as infiltration, topical nerve block, spinal, and caudal, is of interest. Research data relative to more effective therapy when penicillin is used in conjunction with Benemid completes the exhibit. Expertly trained personnel solicit discussions on these observations.

Booth 31. M & R Laboratories, Columbus, Ohio. Your Similac representatives are happy to take part in this meeting. They are pleased to have the opportunity to discuss with you the role of Similac in infant feeding. They have for you the latest *Pediatric Research Conference Reports.* Also available are current reprints of pediatric nutritional interest.

Booth 32. Saratoga Springs Authority, Saratoga Springs, N. Y. This exhibit depicts the components of a Spa regime and stresses the value of Saratoga natural mineral water baths in arthritis and rheumatism, hypertension and coronary artery disease. It points out that a "health vacation" is good preventive medicine in this modern age of stress. Saratoga Spa literature will be made available.

Booth 33. Medical-Surgical Plan of New Jersey, Newark. Medical-Surgical Plan of New Jersey is a cooperative community enterprise, representing a partnership between 5200 Participating Physicians and more than 1,200,000 citizens of New Jersey who are enrolled in the Plan. Medical-Surgical Plan is dedicated to the proposition that doctors and their patients can solve their mutual economic problems through voluntary efforts.

This exhibit has been prepared and will be presented by the Staff of Medical-Surgical Plan, for the information and service of the Participating Physician, whose cooperation has made it possible for Medical-Surgical Plan to render an increasing service both to the profession and to the public.

Booth 34. Schering Corporation, Bloomfield. Members of The Medical Society of New Jersey and their guests are cordially invited to visit the Schering exhibit where new therapeutic developments will be featured. Schering representatives will be present to welcome you and to discuss with you these products of our manufacture.

Booth 35. Pet Milk Company, St. Louis. We will be pleased to have you stop and discuss the variety of time-saving material available to busy physicians. Our representatives will be on hand to discuss the merits of Pet Evaporated Milk for infant feed and Instant Pet Nonfat Dry Milk for special diets. A miniature Pet Evaporated Milk can will be given to all visitors.

Booth 36. Bilhuber-Knoll Corporation, Orange. Oral Metrazol can be of advantage to you in treating the aged patient with fatigue and mental confusion. Beneficial changes in behavior, alertness, appetite and sleep pattern have been reported. Available to you will be expertly prepared information on Metrazol, on Dilaudid, a most potent and smooth cough sedative, Tensodin and other prescription specialties. Your discussion is invited.

Booth 37. Faulhaber and Heard, Inc., Newark. Particulars can be obtained on professional liability protection upon inquiry at your official broker's booth.

Individual protection is also available for professional employees, such as registered or graduate nurses, x-ray or laboratory technicians and physiotherapists.

Booth 38. E. and W. Blanksteen, Jersey City. Members of The Medical Society of New Jersey have continued to participate in a new high level of policyholder status under the group plan of accident and health insurance with the National Casualty Company, through the Society's accident and health insurance brokers, E. & W. Blanksteen of Jersey City.

More than 75 per cent of the eligible members of the State Society are insured under this program.

Booth 39. Sandoz Pharmaceuticals, Hanover. You are cordially invited to visit our display, which includes Fiorinal, a new approach to therapy of tension headaches and other head pain due to sinusitis and myalgia.

Sandoz introduces a new sedative-hypnotic, Plexonal. This exhibit will show that Plexonal is not just another sedative, but is one developed in a new pharmacologic approach. The action of subthreshold doses of classic sedative agents is potentiated and enhanced by autonomic and central action drugs.

Also featured is Bellergal, the time-tested, clinically-proved potent autonomic inhibitor in a variety of psychosomatic disorders. Supporting clinical evidence will be presented.

Acylanid has all the *advantages* of digitoxin but the *safety* of whole leaf digitalis.

Booth 40. Winthrop-Stearns, Inc., New York. Theominal R.S. (Theominal with Rauwolfiia serpentina), an alliance of the classic and contemporary in antihypertensive compounds. Theominal R.S. combines the vasodilator and myocardial stimulant actions of theobromine and Luminal with the moderate central hypotensive effect of Rauwolfia serpentina. Gentle sedation calms the patient and

a feeling of "relaxed well being" is established. Headache and vertigo disappear as the blood pressure and pulse rate are reduced gradually.

Hypaque sodium 50 per cent sterile solution (ampuls of 30 cc.), new well tolerated highly radiopaque medium for excretion urography, contains 59.9 per cent iodine. Produces excretory urograms of a clarity approaching that usually obtained by the retrograde method.

Booth 41. S. J. Tutag & Co., Detroit. Featured will be Vagimine Inserts, the ideal approach for vaginal infections. Vagimine offers a 7-way attack on trichomonal and moniilial vaginitis. Vagimine now makes vaginal smears unnecessary in determining the course of therapy. They are dainty, easy to use and economical.

You are cordially invited to stop at the booth and receive a complimentary bar of TX-11 soap, containing Actamer, the newest bacteriostat.

Booth 42. E. R. Squibb & Sons, New York.

Booth 43. Kirsch Beverages, Brooklyn. No-Cal, the original non-fattening soft drink, will be sampled at booth 43. This revolutionary beverage is sugar-free, salt-free and contains no fats, proteins or carbohydrates with no calories derived therefrom. It comes in seven flavors: Ginger, Lemon, Black Cherry, Root Beer, Cola, Creme and salt-free Club Soda. It has been on the market for more than three years and has proved a boon to diabetics, restricted dieters and weight watchers in general. It is accepted by the Council on Pharmacy of the American Medical Association.

Booth 44. American Ferment Co., Inc., New York. Representatives will welcome the opportunity to demonstrate the proteolytic and mucosolvent action of the enzyme, Caroid, and to discuss Caroid and Bile Salts Tablets and Alcaroid Antacid. Supligol, a whole bile-ketocholanic acid compound useful in the management of biliary dysfunction will also be featured.

Booth 45. C. B. Fleet Company, Inc., Lynchburg, Va. During the past fifty years Phospho-Soda (Fleet) has been a symbol of elegance in sodium phosphate medication. Fleet Enema Disposable Unit—an enema solution of Phospho-Soda (Fleet)—is a worthy companion product. The single use unit simplifies and assures satisfying preparation for proctoscopy and as a routine enema it is a boon to the hospitalized patient.

Booth 46. The Liebel-Flarsheim Company, Cincinnati. The Liebel-Flarsheim Company's latest electromedical and electrosurgical apparatus will be available for examination and demonstration. Capable representatives will be on hand at all times and we sincerely hope you will stop by so that we may become acquainted.

Booth 47. Walker-Gordon Laboratory Company, Plainsboro. Walker-Gordon recently announced a fresh, fluid Low-Sodium Certified Milk containing less than 50 milligrams of sodium per quart. This is the first fluid low-sodium milk produced in the New Jersey area. It has the same excellent flavor and is made of Walker-Gordon Certified Whole Milk. It may be obtained from any milk dealer in New Jersey. You are invited to taste-test this milk at the Walker-Gordon booth.

The Walker-Gordon Laboratory Company's Certified Milk Farm in Plainsboro is the world's largest farm producing Certified Milk. It includes over 2400 acres of farm land and 2690 cows and growing heifers. It is the home of the famous Rotolactor, the purpose of which is to make possible the production of a cleaner milk.

Walker-Gordon produces Certified Raw Milk, Certified Pasteurized Milk, Homogenized Vitamin D Milk, Fat Free Milk, Acidophilus and Lo-Sodium Milk. It is distributed in the metropolitan areas of New York, Philadelphia and in the State of New Jersey by many leading milk dealers.

Booth 48. Medco Products Co., Tulsa, Okla. Completely automatic is the new Medcolator, a portable (15 lbs.) neuromuscular stimulator which is the answer to many problem cases. It is indicated in many low back conditions, bursitis, arthritis, neuritis, torticollis, sciatica, poliomyelitis, myositis, fibrositis, sprains, myalgia of the head, and so forth. Painful conditions are treated painlessly even though powerful muscular contractions are experienced. Two of our six models include the galvanic current. In the vast majority of cases where the unit is indicated, the following may be expected of the Medcolator: (1) Reduce pain (2) Reduce edema (3) Increase range of joint motion (arthritis, et cetera) (4) Increase muscle strength and (5) Increase muscle sense.

Nearly 11,000 Medcolators are now in use by physicians.

Booth 49. Smith, Kline and French Laboratories, Philadelphia. The S.K.F. booth will feature the latest clinical information about the remarkable new drug—Thorazine—and its many and varied uses. These uses include potent anti-emetic action, potentiation of other drugs, and its unique and dramatic applications in the field of mental and emotional problems. Thorazine is a trademark registered by S.K.F.

Booth 50. Bristol-Myers Products Division, New York. Here are four products you'll want to know about: Bufferin Antacid-analgesic — Acts twice as fast as aspirin, does not upset the stomach. Sal Hepatica—Effervescent saline laxative. Ammens Medicated Powder—Relieves itching and burning skin; discourages bacterial growth. Trushay—The "before-hand" lotion. Helps keep hands smooth in spite of roughening scrubbings.

Booth 51. South Jersey Surgical Supply Co., Red Bank. South Jersey Surgical Supply Co. is pleased to again be part of the Annual Meeting of The Medical Society of New Jersey. This year we will introduce the latest in the new therapeutic agent, the Burdick Ultrasonic Generator. In addition to this, we will display the latest diagnostic and surgical instruments, which have always been so well received at past meetings.

Booth 52. The Borden Company, New York. There's no better place to talk over the latest information on infant feeding than the Borden Prescription Products booth. On display is the complete line of Bordon infant formula products for every feeding purpose or preference. If you're encountering hyperirritability or excoriation, you'll be interested in Bremil, a formula patterned upon breast milk. If you suspect milk allergy in some of your patients, you'll find the answer in either Liquid or Powdered Mull-soy, leading hypoallergenic food. For prematures, or for digestive disturbances demanding low fat and high protein, Dryco provides an ideal flexible formula base. And if your preference is for liquid products, you'll want the latest facts about Biolac.

Booth 53. Ames Company, Inc., Elkhart, Ind. Clinitest, for urine-sugar analysis, is standardized. This assures uniformly reliable results whenever and wherever a test is performed: office, ward clinic, or patient's home. Standardization not only curtails error, but saves personnel's time by elimination of preparing and mixing of reagents. Ictotest, a 30-second tablet test for the detection of urine bilirubin as an aid to early diagnosis and management of jaundice and hepatitis, will be demonstrated.

Booth 54. Ortho Pharmaceutical Corporation, Raritan. The Ortho display will feature Preceptin vaginal gel, our product for conception control, designed for use without a vaginal diaphragm. Preceptin vaginal gel has achieved an outstanding record of clinical effectiveness and has been widely acclaimed by the medical profession. Your inquiries on Preceptin vaginal gel are invited.

Booth 55. Nepera Chemical Co., Inc., Yonkers, N. Y. The Nepera exhibit features a new drug, Choledyl (choline theophyllinate), which represents a major advance in oral theophylline therapy. Whenever an oral xanthine is indicated, Choledyl assures higher theophylline blood levels, greater effectiveness, and superior patient tolerance.

Also featured are: Biomydrin Nasal Spray, for effective antibiotic activity, prolonged nasal decongestion, and antiallergic effect; and Biomydrin Otis, for antibacterial, antifungal, and antipruritic action in otitis externa and media.

Two other preparations will be exhibited: Mandelamine Hafgrams, a urinary antiseptic; and Neohetramine, an antihistaminic.

Booth 56. E. Fougera & Company, Inc., New York. We cordially invite physicians to discuss with professional service representatives new preparations of importance to their everyday practice. Descriptive literature and samples of all products will be available.

Booth 57. The Upjohn Company, Kalamazoo. Members of the medical profession are invited to visit the Upjohn booth where members of The Upjohn Company professional detail staff are prepared to discuss subjects of common interest.

Booth 58. G. D. Searle & Co., Chicago. You are cordially invited to vist the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research. Featured will be Mictine, the new diuretic; Vallestril, the new synthetic estrogen with extremely low incidence of side reactions; Banthine and Pro-Banthine, the standards in anti-cholinergic therapy; and Dramamine, for the prevention and treatment of motion sickness and other nauseas.

Booth 59. The Baker Laboratories, Inc., Cleveland. You are invited to visit our booth where Baker's Modified Milk and Varamel, two successful products for infant feeding, are on display. Baker representatives will be glad to discuss the practical application of Grade A milk, adjusted fat composition, zero curd tension, synthetic vitamins and other important factors which help to eliminate many of the problems in modern infant feeding.

Booth 60. The Wm. S. Merrell Company, Cincinnati, Ohio. The Wm. S. Merrell Company presents Bentyl, the safe, effective, yet comfortable antispasmodic that is superior to atropine and belladonna for relief of nervous indigestion.

Bentyl has a musculotropic action like that of papaverine, and a neurotropic action like that of atropine. Because of its unique specificity for the genito-urinary tract, Bentyl is virtually free of the side effects generally associated with antispasmodics, and offers effective relief without "belladonna backfire."

Literature, including reprints reporting more than 1500 cases treated with Bentyl, is available at the booth.

Booth 61. Ayerst Laboratories, New York. Ayerst Laboratories will feature Mediatric and Thiosulfil. You are cordially invited to visit our booth where Ayesrt representatives will be on hand to welcome you and to discuss these and other Ayerst products including many new specialties which have been added to the Ayerst line during the past year.

Booth 62. White Laboratories, Inc., Kenilworth. White's Lactofort is a unique milk-fortifying supplement. It combines 1-Lysin, vitamins and minerals. Lysine, the key amino acid, is essential for optimal protein utilization, but is not adequately available in the diet of infancy and early childhood. Lactofort improves appetite, weight, nutrition and muscle tone. It promotes normal growth and development.

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TO

ANNUAL REPORTS

THE MEDICAL SOCIETY OF NEW JERSEY

ANNUAL REPORTS TO THE HOUSE OF DELGATES

APRIL 17, 18, 19 and 20, 1955

President

(Reference Committee "A")

ELTON W. LANCE, M.D., Rahway

IT IS inevitable that the President of an organization whose interests are as varied and whose business is as complex as ours should find that time always proves shorter than he would like for accomplishing all that he envisioned. My experience in this regard has been especially poignant, because my presidential year has passed in eleven swift and crowded months. These have not been months productive of any single spectacular achievement, but they have been months of constructive and fruitful effort toward the realization of increased organizational efficiency, fuller and more effective understanding and cooperation at all levels, and of genuine progress toward our professional goals.

In my inaugural address, I declared: "Collectively we will strive so to organize, integrate and correlate our activities in the State and component societies that all members will have a sense of active participation in and responsibility for the policies and procedures of organized medicine in New Jersey. To achieve such organization this year, with the approval of my fellow officers and the Board of Trustees, on an experimental basis, I propose reconstituting as special committees certain advisory committees whose work is of a continuing character, and eliminating other advisory committees whose interests will be dealt with for this year at least, directly in the subcommittees which previously they served. The subcommittees involved will be proportionately expanded to provide and insure adequate personnel for the efficient and well-balanced handling of all matters, and the proper protection of all interests."

To that declaration I have been faithful and, I am happy to report, with results that more than fulfilled my hopes. Our subcommittees have functioned with unprecedented smoothness and dispatch. With the aid of their respective special committees, the expanded Subcommittees on Medical Practice and Public Health have given consideration to and effectively dealt with a wide range of matters that were maintained in balanced perspective and disposed of always with a view to the interests and advantages of the entire membership. The Subcommittees on Public Relations and Legislation have carried on with traditional energy and adequacy and, by utilization of established media of contact with the society, have succeeded in keeping our members informed and advised as never before. By means of questionnaires, bulletins, detailed publications, and official memoranda this year we have made certain that all our members were kept constantly and properly informed concerning all matters pertinent to their advantages as individual practitioners and as members of organized medicine. In consequence of the efficiency and dispatch achieved by the subcommittees, the agenda of the Welfare Committee meetings have been well ordered and complete, and recommendations have moved with marked celerity toward policy making levels.

As the result of an early directive to specialty societies, recommending that they address requests for our official Society actions to the President or the Chairman of the Board, the conduct of official business has been speeded up. Through the use of the "official intermediaries" designated by the Society as contact agents with the specialty groups, business originating with our Society and involving the specialty groups has been measurably expedited, with consequent improvement in reciprocal relations.

In view of the advantages flowing from these changes in our organization and procedure, I recommend their continuance. Attendance has been better at committee meetings, with the possible exception of the Wel-

fare Committee itself, and discussion has been detailed and comprehensive. Moreover, in consequence of the reduction of the number of overall committee meetings, reductions in operating expenses have been realized, which further recommend the continuance of this committee plan.

Probably more than by any other single item of Society concern, our time and efforts from May until November were dominated by our interest in and support of the referendum for the establishment of a State Medical-Dental School and Health Center. Every phase of the many problems which the project embraced were given detailed consideration. Hence our disappointment was the greater when the referendum failed of popular support —not, however, in consequence of any lack of positive measures on our part, but as the result of economic considerations with which as a Society we were powerless to deal. We initiated the project and helped achieve the passage of the legislation that brought the issue to the citizens for decision. To that decision, in democratic spirit, we must necessarily bow.

In summary, then, this year has been a year of encouraging improvement in internal organization, understanding, and cooperation, and of continuing satisfactory development of all our external bonds. For the generous efforts expended on every side, which made the work of this year effective, I am indebted beyond my ability to acknowledge or repay. Certainly, to all of the Society who assisted in spirit and in deed, to my fellow officers, to the members of the Board of Trustees, to committee chairmen and members, to the members of the Woman's Auxiliary, to all the members of the staff, I confess a debt of appreciation and gratitude which is as profound as it is pleasing. The experiences of this year as the President of The Medical Society of New Jersey I shall truly delight to remember.

Secretary

(Reference Committee "A")

Marcus H. Greifinger, M.D., Newark

The office of the Secretary has continued to be an active one. Routinely, numerous communications have been promptly answered and questionnaires from various sources completed and returned.

The Secretary attended the annual A.M.A. session in San Francisco and the mid-winter meeting in Miami as well as meetings of the Board of Trustees and several committees of which he is chairman, member, or advisor.

MEMBERSHIP

(As of December 31, 1954)

Active Members—Paid	5,347
Exempt	248
Total Active Members	5,595
Associate Members	111
New and Reinstated Members	88
Members Deceased	47
Transfers—within the state	7
Resignation and transfers out-of-state	10
State Emeritus Members	92
State Honorary Members	5
Members Dropped for Non-payment of dues	68
A.M.A. Members	5,205

The Constitution and By-Laws requires that county treasurers will send to the State treasurer by the first of March a complete list of paid-up and exempt members in good standing; and that members not reported by June first shall be dropped from the rolls.

On March 1, 1954, the total reported active membership was 3,797.

On June 1, 1954, the total reported active membership was 5,309.

On December 31, 1954, the total reported active membership was 5,595.

On March 1, 1955, the total reported active membership was 4,411.

These figures prove that a considerable number of members are lax in paying their dues promptly. We repeat again this year, as we have for several years past, the request that county societies emphasize the importance, even necessity, of maintaining membership in good standing at all times. Each year a number of members neglect to pay their dues promptly, thereby allowing their membership to lapse. As a result, many benefits must necessarily be suspended and their insurance is jeopardized.

A.M.A. MEMBERSHIP

MUCH time is spent by the staff in recording A.M.A. dues payments and in preparing and transmitting reports to the A.M.A. office in Chicago. Every three months, the A.M.A. refunds to the State Society 1 per cent of the monies sent to Chicago. This refund is represented to be reimbursement for expenses incurred in the collection and reporting of A.M.A. dues. The State Society remits, on a pro-rated basis, the full refund to the county medical societies. The cost to the State Society of the collection and reporting of A.M.A. dues is approximately 4½ per cent. For several years our delegates have tried to have the A.M.A. increase its percentage of refund but so far have been unsuccessful.

With a total A.M.A. membership on December 31, 1954, of 5,205, New Jersey is entitled to a sixth delegate to the A.M.A. It is hoped that we can maintain, and even increase, our A.M.A. membership so that we may hold this increased delegation.

MEMBERSHIP DIRECTORY

DURING the summer of 1954 work began on the 1955 Membership Directory. Each listing in the 1953 issue was copied and mailed to the members for correction and return. In addition, listings of new and reinstated members not included in the 1953 issue were prepared and submitted for correction. To date a total of 5,933 listings have been mailed; 4,865 or 82 per cent have been returned. As new and reinstated members are being reported for 1955, listings are prepared promptly and mailed so that the new issue will be as complete as possible.

June 1, 1955, will be the closing date for the directory copy. Members not paid by June 1 will not be included in the directory. For those who do not return their listing by that date, the listing will be the same as previously published.

Following is a cost analysis of the 1953 Membership Directory:

Cost of Publication—6,000 copies	$10,587.56
Sales to members, hospitals, and outside agencies	2,592.50
Net cost ($1.50 per member; 75 cents per year)	$ 7,995.06

5,378 copies were distributed without charge to active members.

Because of the increased membership and the demand for the directory by others, 7,000 copies of the 2d edition will be printed. September has been scheduled for release of the 1955 Membership Directory.

Treasurer

(Reference Committee "B")

JESSE MCCALL, M.D., Newton

AS THE fiscal year does not close until May 31, 1955, the annual report cannot be submitted at this time. An interim report will be presented to the House of Delegates on April 17, 1955, covering the accounts to that date.

Board of Trustees

(Reference Committee "A")

C. Byron Blaisdell, M.D., Chairman, Asbury Park

The report of the Board of Trustees is a matter of highlighting the Board actions of the year—most of which have been reported in The Journal. This year has made heavy demands upon the time of the members of the Board. Meetings have been held every six weeks since last summer. I wish to record my appreciation and gratitude to all the Board members. They have served loyally and diligently in the interests of the Society. And I commend the dependable and orderly work of the numerous committees. Their generous endeavors greatly facilitated the conduct of the Society's business.

TRUSTEE, FIFTH DISTRICT

At the reorganization meeting, the Board received the resignation of Dr. Albert B. Kump as trustee for the fifth district, following his election by the House of Delegates as the second vice-president. Dr. Carl N. Ware of Shiloh was elected to fill the vacancy.

EDITOR

Dr. Henry A. Davidson, editor of The Journal for eleven years prior to moving to Washington, D. C., was re-appointed editor shortly after his return to New Jersey last summer.

DELEGATES FROM OTHER STATES

The recommendation of the Nominating Committee that we exchange delegates with the medical societies of Pennsylvania and Delaware was favorably considered by the Board. The President of the Pennsylvania State Medical Society will attend our Annual Meeting as his society's representative.

HOSPITAL SERVICE PLAN

The resolution of the Gloucester County Medical Society, calling for a study of the possibility of having members of the Medical Society enrolled in H.S.P. as a state group, and enabling members of eight smaller societies, unable to meet the higher enrollment requirements, to become subscribers to the Plan, was referred to the Commitee on Medical Defense and Insurance.

Arrangements have been made with H.S.P. by the committee to enroll these eight counties as a unit, provided that 51 per cent of the total membership of these counties would participate. It was felt that state enrollment would jeopardize the county societies now enrolled since they have but 59 per cent of membership enrolled—8 per cent above the necessary 51 per cent. This is considered to be too small a safeguard.

The enrollment offer has been submitted to the eight counties for consideration and action. One county has indicated it is not interested in participating at this time. Two counties are polling their members.

STATE BOARD OF MEDICAL EXAMINERS

Nominations were submitted to the Governor for terms on the State Board of Medical Examiners. Dr. Ralph M. L. Buchanan of Phillipsburg was appointed for one term, and Dr. Elmer P. Weigel of Plainfield was reappointed to succeed himself.

LIAISON REPRESENTATIVES AND COMMITTEES

Some liaison representatives and committees with other organizations were discontinued this year because they had either fulfilled their original purpose or had no demands made upon them. The majority were continued and some others appointed. The Society now has liaison with most of the State Departments and Bureaus, the allied professions, the lawyers, and with organizations mainly concerned with the public health and welfare.

MEDICAL DENTAL SCHOOL

A major portion of the discussion and planning in the first four meetings of the Board was devoted to the altruistic plan for a medical-dental school to be erected and supported by State funds. The Board authorized

the setting-up of a "Nonpartisan Committee," which backed the campaign for a "yes" vote on the enabling referendum. The efforts of Governor Meyner, and many legislators, of our own county societies, and members, and of the many organizations and public spirited citizens, who gave so much time and thought to the campaign and its goal, are herewith acknowledged. We regret we cannot report success on our sincere attempts to provide for the youth of New Jersey at this time a medical-dental school designed to meet the full needs of our rapidly growing and cosmopolitan population.

MEDICAL TESTIMONY

THE matter of medical testimony was brought to the Board's attention from many critical sources. After consideration by the Medical-Legal Liaison Committee, a special committee of the New Jersey Bar Association and our Society has been appointed to confer, so that a proper solution may be reached. With the approval of both groups, this could then be jointly submitted to the State for appropriate action.

INVESTMENTS

WITH the passage of the amendment to the Society's charter last summer, making it possible for the Society to invest funds without the limitation of $1,000 per annum income, the Board authorized the Treasurer to make deposits or investments in interest-bearing bank accounts, savings and loan organizations insured by a federal agency, and in government bonds. With the advice of the Finance and Budget Committee, the Treasurer has reported the investment program is well under way and will be completed shortly.

BLOOD BANK SURVEY

A BLOOD BANK survey is underway by a special committee to determine the existing facilities in the State and the possibility of establishing a central agency. The results will be studied by the committee and, if conditions warrant, it may be desirable eventually to set up a separate agency to administer the program.

COMMERCIAL INSURANCE

THE Board investigated the question of collaborating with companies offering comprehensive prepayment policies to their employees and developing lists of participating physicians who would accept payment from commercial carriers in full for their services.

The following was adopted on January 30, 1955: "This Society is not in a position to restrict its members as individuals in their association with insurance carriers, and the Society has no such policy of restriction; its members are free to join as many panels as they please so long as there is no question of medical ethics and/or professional conduct involved."

REFERRALS TO HOUSE OF DELEGATES

SEVERAL matters have been considered by the Board during the year and are now referred to the House of Delegates for consideration:

Employees' Pension Plan (Reference Committee "B")

The House of Delegates recommended that a pension plan be adopted for the Society's employees, that the Board appoint a committee to study several plans, and that a report be made to the House in 1955. A special committee worked on this, and a satisfactory plan has been approved by the Board of Trustees. The details will be presented by the Finance and Budget Committee.

Apportionment of Available Surgical Fees (Reference Committee "C")

The Board instructed our A.M.A. delegates to present a resolution to the A.M.A. House of Delegates setting forth the four points dealing with the apportionment of available surgical benefits adopted by our House last May. The following was adopted by the A.M.A. House of Delegates:

Therefore be it resolved, That the House of Delegates of the American Medical Association approve the principle that a Blue Shield Plan may make separate payments to eligible physicians who render services to an enrolled patient from the maximum scheduled payment available for such services, under the following circumstances:

1. That the total eligible surgical payment may be apportioned to provide payment for preoperative care, for the surgical procedure, and for the surgical assistance and/or postoperative care.

2. That upon certification of the operating surgeon, the scheduled amounts available for preoperative and/or postoperative care and/or surgical assistance may be paid by the Plan

to a physician other than the operating surgeon provided that such other physician has properly rendered such services.

3. That each physician submit his individual report and charges to the Plan according to the services rendered the patient.
4. That the Plan make separate payment for the services of each physician.
5. That the Plan notify the patient of each payment made by the Plan.

The matter was referred to Medical-Surgical Plan to implement as rapidly as possible in accordance with the action of our 1954 House of Delegates and the resolution adopted by the A.M.A.

Medical-Surgical Plan notified the Board that under the terms of the Enabling Act, it could not transact business in any county if less than 51 per cent of the eligible physicians in such county are participating physicians. It would be necessary for the Plan, therefore, to determine in advance whether the profession in any county objects to the implementing the apportionment of available surgical benefits in that county. The Plan conducted a poll of participating physicians. Results indicated 63.6 per cent returns—54.9 per cent approving, 8.7 per cent disapproving. Mercer County returned a narrow majority vote (100 to 96) disapproving.

The Board recommended to Medical-Surgical Plan that, if the results of the poll indicated approval, the apportionment of surgical fees should be handled on a county basis. The Board recognized that this decision would demand an ethical and equitable understanding between surgeon and operating assistant.

Society for Relief of Widows and Orphans of Medical Men in New Jersey (Reference Committee on Miscellaneous Business)

Dr. E. Zeh Hawkes, a Fellow of The Medical Society of New Jersey, appeared as spokesman for the Society for Relief of Widows and Orphans of Medical Men in New Jersey before the Board. He submitted the following requests as a means of attaining a desirable increase in membership:

1. Hearty endorsement of the Society, not only by the Board of Trustees, but also by the House of Delegates.
2. Space in our publications (Memberships News Letter and JOURNAL) so that the Society can be kept in the minds of all members of The Medical Society of New Jersey.
3. That the Society be officially embraced by the appointment of a committee of the State Society, to be the Widows and Orphans Committee—such now exists in the State Auxiliary and in some county medical societies.

The Board acted favorably on this. The request for endorsement of this Society by the House of Delegates is referred to the House.

Workmen's Compensation Fees (Reference Committee "E")

THE 1952 House of Delegates adopted a resolution establishing a minimum fee of $5 for the initial office visit and $4 for subsequent visits for compensation cases. The House resolved that this schedule be upheld in all county societies.

On several occasions letters have been received from members protesting an arbitrary reduction of fees in workmen's compensation cases by insurance companies. In September, the Board received official communications from two county societies soliciting State action in the matter. The Board referred it to the Special Committee on Workmen's Compensation and Industrial Health with a directive that it seek a meeting with insurance companies to discuss the subject.

The special committee met with representatives of the Newark Casualty Insurance Claims Managers Council. The following report was then submitted to the Board. The Board refers this to the House of Delegates:

Numerous claims for medical payment were considered along with the amount of payment made by the various insurance companies. The majority of the bills were for less than $25. In practically all cases, the initial or emergency fee was paid. The subsequent visits were reduced to a fee of $3 each in the average compensation case. After considerable discussion *pro* and *con* regarding all phases of this problem, your committee and the Claims Managers Council Committee agreed on the following:

1. New Jersey has no fixed fee schedule. It is our combined opinion that one would not be desirable.
2. The fee of $5 is a reasonable and just one for an initial visit or treatment in the average compensation case. The fee of $3 in the *average* compensation case is adequate, reasonable, and fair.
3. Negotiation of rates between the Casualty Insurance carriers and the individual doctors is the democratic method of handling the matter of fees, and it should be encouraged.
4. A committee of the Newark Casualty Insurance Claims Managers Council would be glad to meet with a committee from any county medical society to discuss mutual problems.

Criteria for Specialists (Reference Committee "C")

IN 1953 the House of Delegates approved the recommendation of Medical-Surgical Plan "that consultations be eliminated as an eligible service." The House also approved the recommendation of Reference Committee "C" "that the Medical Society establish qualifying criteria for the recognition of specialist consultants to whom payment may be made by the Plan in the future if feasible."

Last year five qualifying criteria for the recognition of specialist consultants were adopted. The Board of Trustees instructed county societies to furnish lists of consultants to Medical-Surgical Plan through a committee (such as the Hospital Relationships Committee). It was asked that a copy be filed in the State Society Offices, and that the lists be revised annually.

The following letter was received from Medical-Surgical Plan by the Board of Trustees at its meeting on November 7, 1954:

> In reviewing the 1953 action of the House of Delegates, it was noted that the action was in reference to Plan proposals in connection with a new series contract, one of which was not to include consultation as an eligible service.
>
> After careful deliberation and consideration of all aspects of the problem by the Plan Board of Trustees, it was the consensus that consultations as such are not a practical insurable risk under a Plan Subscription Contract, and that the Board has reluctantly decided not to include consultations as an eligible service under the new Subscription Contract.
>
> With respect to the present Plan Subscription Contract, there is no specification of qualifications set forth therein, and no such specification can be insisted upon in absence of amendment of the Contract provisions.

The Board of Trustees referred this communication to the House of Delegates, and the county medical societies were requested to withhold preparation of their lists until the matter has been dealt with by the House.

Medical-Surgical Plan (Reference Committee "C")

ITEMS having to do with Medical-Surgical Plan which were included in the annual reports of several committees, and approved by the 1954 House of Delegates, were submitted to Medical-Surgical Plan. The following communication was received from Medical-Surgical Plan by the Board of Trustees on November 7, 1954. It is transmitted to the House of Delegates for its information:

> The following items approved by the House of Delegates at the 1954 Annual Meeting and submitted to the Plan for consideration have been reviewed by the Board of Trustees:
>
> (1) Points of re-emphasis from the Committee on General Practice:
>
> (a) "That provision be made by the Medical-Surgical Plan for the payment of appropriate fees for physicians assisting at either surgical or obstetrical procedures in hospitals."
>
> The Plan has reviewed its experience in the past with payment for services of surgical assistants. Under the first Subscription Contract (1942 Series), although provision for surgical assistance was not specifically included as an eligible service, the Board authorized payment for surgical assistance as an additional benefit.
>
> In the opinion of the Board, the experience was unsatisfactory because this expansion of coverage resulted in excessive utilization. Therefore, the services of a surgical assistant were specifically excluded in subsequent Subscription Contracts.
>
> The Board considers separate payment of surgical assistants an uninsurable risk, except as an apportionment of the total available surgical benefit.
>
> (b) "The Plan should likewise allow the same payment for emergency medical or other emergency office procedures as it allows for office emergency surgical procedures."
>
> Office emergency surgical procedures eligible for Plan payment under the Subscription Contract are limited to surgical (not medical) services of an emergency nature, occasioned by accidental injury, rendered within 48 hours after the accident, but not exceeding $25.00 in connection with any one accident.
>
> Any further expansion of coverage for office services would require an increase in contract premium rate. The Plan cannot recommend that the scope of coverage outside of hospital be so increased under the current contract.

(2) Point of reaffirmation from the Committee on Group Practice:

"That group clinics could do much to relieve overcrowding in hospitals if their medical and surgical treatments were endorsed by the Medical-Surgical Plan and other insurance plans."

The following services of an Eligible Physician rendered to an eligible person outside of an approved hospital are eligible for Plan payment under the terms of the Plan's Subscription Contract:

(a) Eligible surgical services (not medical or obstetrical services) of an emergency nature, occasioned by an accidental injury, rendered within 48 hours after the accident. Plan payment would be in accordance with the Plan's Schedule of Payments, but not exceeding $25.00 in connection with any one accident.
(b) Services for removal of tonsils and/or adenoids.
(c) Obstetrical services in eligible cases under Family Subscription Contract.

Such services are eligible when rendered in a group clinic.

(3) Recommendation from the Committee on Welfare Services:

"That the request of the State Commission of the Blind, stating it would appreciate any effort by the Medical Society toward making blind persons (as a group) eligible for benefits of the Hospital and Medical-Surgical Plans, be referred to Medical-Surgical Plan and Hospital Service Plan."

The following observations are pertinent to this recommendation:

(a) Group enrollment is limited to persons at place of employment (or to such groups as lawyers, ministers and physicians) because when enrolled as a group, they afford a cross-section of risk, making possible a lower Contract Rate than is practical under non-group enrollment, where selection against the Plan is greater.

(b) The blind, as a group, not only do not afford such cross section, but actually are a sub-standard group in which (in accidental injuries for example) the risk might be higher even than in non-group enrollment.

(c) The Plan is not legally in position to give lower rates on a discriminatory basis so far as the remainder of subscribers are concerned.

(d) Possibly, the matter of protection for the blind, as a group, should entail study along the lines applicable to other presently uninsurable risks, such as the over-age group, the chronically ill, the unemployed, and the indigent.

Judicial Council

(Reference Committee "A")

D. F. Featherston, M.D., Chairman, Asbury Park

The activities of the Judicial Council of The Medical Society of New Jersey from June 1954 to March 1955 have been most satisfactory. The year has been marked by complete accord within the Council, not only as regards official opinions and actions, but also as regards acceptance of the need for revision and tightening of the procedures governing the entire judicial mechanism.

The following resume of the work of the Judicial Council is offered:

Opinions handed down: 3

Complaints dealt with on referral from county judicial committees: 4

Complaints dealt with at county level, officially reported to the Judicial Council by county judicial committees: 35

Appeal hearings: 1

Special inquiry regarding charges of fee splitting in New Jersey, undertaken at the request of the Board of Trustees.

Two special projects are current. One is the preparation of a *Primer of Information Concerning the Judicial Mechanism of The Medical Society of New Jersey*. The other is the proposed revision of by-laws affecting the operation of the Judicial Council and the county judicial committees.

The greatest problem faced by the Judicial Council has been the lack of efficient performance of many judicial committees of component county societies, especially because of the lapse of time between the reception of complaints and the official disposition of them, and because of the failure of county judicial committees to report upon cases dealt with.

Another obvious defect in the structure of the judicial mechanism became more apparent this year, namely, the uselessness of the District Councils. These have never functioned. They seem to constitute an unnecessary complication of the judicial mechanism. Proposed changes in the by-laws of The Medical Society of New Jersey will be offered by the Council to correct this difficulty, with several other clarifying changes.

It is hoped that through these by-laws changes and the information contained in the *Primer of Information,* the function and power of the Judicial Committees will be more clearly understood and their operation will become more efficient. It is strongly suggested to the component county societies that their judicial committees be chosen from men of maturity and outstanding achievement in the practice of medicine; that they be composed of men of forthright character who are known to be above petty jealousies. A well-functioning committee should remain in office for several years, with committee members staggered in their appointments so that the smoothness and continuity of the work of the committee are not interrupted.

The need for a strong, fearless, and efficient judicial mechanism became apparent first in the conflict against socialized medicine, in which the torch bearers for the profession met a continuous rain of complaints involving overcharging and the unavailability of physicians for emergencies and night calls. These defects continue, and the difficulty of overcoming them becomes evident as complaints continue to be received. The interrelated function and the continued need for a strong judicial committee and an efficient public relations committee become increasingly obvious. It is hoped that by the continued efforts of these two groups, the public relations of the profession can be improved, and that the physician will again assume in the minds and hearts of communities the position of trust and security which he once enjoyed.

First District

Union, Warren, Morris and Essex Counties

Kenneth E. Gardner, M.D., Councilor, Bloomfield

No complaints were brought to the attention of the councilor for the First District; no investigations were made, and no other business was transacted. The meetings of the state judicial council were attended.

Second District

Sussex, Bergen, Hudson and Passaic Counties

Joseph M. Keating, M.D., Councilor. Passaic

No business was referred to the councilor for the Second District for the year 1954-55. No meetings of the Council of the Second District were held during the year 1954-55.

Third District

Mercer, Middlesex, Somerset and Hunterdon Counties

Jacob J. Mann, M.D., Councilor, Perth Amboy

As councilor of the third district, I am pleased to report that all matters of a judicial nature were settled at county level this past year. It has been a pleasure to serve on the State Council.

Fourth District

Camden, Burlington, Ocean and Monmouth Counties

Daniel F. Featherston, M.D., Councilor, Asbury Park

The Fourth District was apparently without matters for reference to the Judicial Councilor during the year with the exception of Monmouth County, which had three cases. Two of these were complaints of excessive charges, which the Judicial Committee of the county handled in a creditable manner. The close cooperation between the Judicial Committee and the Public Relations Committee in Monmouth County prevented several serious situations from developing.

Fifth District

Cape May, Cumberland, Atlantic, Gloucester and Salem Counties

Isaac N. Patterson, M.D., Councilor, Westville

The Fifth District has no report for this year, although we have stood by for any calls for assistance. We are happy to report that no such calls were made upon us.

Executive Officer

(Reference Committee "A")

RICHARD I. NEVIN, Trenton

THE work of the Executive Offices is coextensive with the range and character of all the official business of the Society. The official business of the Society can be considered under five headings: (1) Business centering about membership services and benefits; (2) Business dealing with the official operations of the Society through its agents and agencies; (3) Business deriving from the administration of Society concerns with reference to organized medicine; (4) Business arising from the administration of matters with reference to associated and cooperating non-medical groups and associations; and (5) Business dealing with the relations of doctors, individually and collectively, with the general public.

Routine operations under these headings include such matters as the following:

Group 1. Business centering about membership services and benefits.

Maintenance of official lists of members, revised and corrected from week to week for accuracy.

Correlation of our official lists with those of the county medical societies, on the one hand, and the American Medical Association, on the other.

Biennial preparation and distribution of the Membership Directory.

Preparation and publication of THE JOURNAL of The Medical Society of New Jersey and of the *Membership News Letter*.

Planning, organizing, and supervising all details of the Annual Meeting.

Operation of the Physicians Placement Service.

Processing of inquiries and problems submitted by component societies, groups of doctors, or individual members.

Group 2. Business dealing with the official operations of the Society through its proper agents and agencies.

All official concerns of the House of Delegates and its committees; officers of the Society and the Board of Trustees; the Judicial Council; the official liaison committees; the Standing Committees; the Welfare Committee and its four subcommittees: and the special committees to the Society, the House of Delegates, the Board of Trustees, and to the Welfare Committee and its subcommittees.

Group 3. Business deriving from the administration of Society concerns with reference to organized medicine.

With county societies — presenting and cooperating in the carrying out of all recommendations, projects, and programs originating with the State Society.

With specialty societies — channeling through "official intermediaries" all matters originating with our Society for their official cooperation; and processing all requests for our Society's official consideration and action emanating from the specialty societies.

With the American Medical Association — at all levels, taking care of matters of common concern in the fields of legislation, public relations, and all special services.

With the Woman's Auxiliary to The Medical Society of New Jersey — rendering cooperation and assistance at state and at county level.

Group 4. Business arising from the administration of matters with reference to associated and cooperating non-medical groups and associations.

State Government — all branches are involved, especially the Legislature and the Courts, and the Departments of Health, Education, Labor, Institutions and Agencies, and Law and Public Safety.

Allied Professions — nursing, dentistry, pharmacy, the bar, and the hospital association.

Other Agencies — all civic, community, and service groups, at state and local levels.

Group 5. Business dealing with the relations of doctors, individually and collectively, with the general public.

Responsibility for all official publicity, including the presentation of speakers with official approval; responsibility for the channeling of matters which involve the Society's public relations interests.

Responsibility for cooperating with the Judicial Council and the statewide judicial mechanism of The Medical Society of New Jersey in handling all complaints and grievances.

Preparation and distribution of bi-weekly *Health Hints* to the newspapers of the State, and of monthly *Junior Health Hints* to the schools enrolled for that service.

Preparation and publication of the *Periodic News Letter* to cooperating agencies.

This year has imposed extra burdens, especially in conjunction with the Society's work in preparing for and supporting the referendum to establish a State Medical-Dental School and Health Center, and with the year-round task of the Subcommittee on Legislation in safeguarding the Society's position with reference to legislative affairs. The fact that our Annual Meeting is in April has necessitated

an acceleration of efforts on the part of all, to guarantee that no aspect of the Society's business may be slighted, despite the pressure of time.

In all our endeavors, we have had the example of the President and his fellow officers, and of the members of the Board of Trustees, and of the committees of the Society. With more than the customary measure of generosity and self-sacrifice, they have given their time and efforts to the service of the Society. We have tried to keep pace with them, in your behalf. It has been a pleasure to work with them for you, the ideals of medicine, and the good of the people. We hope that you will be pleased.

Nominations for Emeritus Membership

(Reference Committee on Resolutions and Memorials)

THE following nominations for election to emeritus membership at the 1955 Annual Meeting have been received from the county medical societies:

Atlantic County—J. Carlisle Brown, M.D., Margate; age 60; retired by reason of ill health; member in good standing since 1925.

Bergen County—Harriet L. Know, M.D., Hackensack; age 82; retired by reason of age; member in good standing since 1900.

Conde deS. Pallen, M.D., LaJolla, Calif.; age 66; retired by reason of illness; member in good standing since 1925.

Christian P. Segard, M.D., Leonia; age 71; retired by reason of age; member in good standing since 1935.

Camden County—Ralph K. Hollinshed, M.D., Westville; age 70; retired by reason of age; member in good standing since 1909.

Essex County—Roy Griffith, M.D., Glen Ridge; age 66; retired by reason of ill health; member in good standing for over 20 years.

Lydia B. Hauck, M.D., Irvington; age 69; retired by reason of ill health; member in good standing since 1923.

Elbert S. Sherman, M.D., Newark; age 82; retired by reason of age; member in good standing for over 50 years.

Albert V. Simmons, M.D., Maplewood; age 70; retired by reason of age; member in good standing for over 20 years.

Leonard H. Smith, M.D., East Orange; age 78; retired by reason af age; member in good standing for over 20 years.

George H. Van Emburgh, M.D., Summit; age 61; retired by reason of ill health; member in good standing since 1920.

Ocean County—Anthony Yurevich, M.D., Lakewood; age 71; retired by reason of age and ill health; member in good standing over 20 years.

Warren County—Edgar Brasefield, M.D., Phillipsburg; age 78; retired by reason of age; member in good standing 50 years.

Proposed Amendment to the Constitution

(Reference Committee on Constitution and By-Laws)

THE following proposed amendment to the Constitution was approved by the House of Delegates in 1954 and is presented for final approval at the 1955 Annual Meeting.

ARTICLE IV—SECTION 5—HONORARY MEMBERS

Honorary Members shall be physicians and surgeons who have attained distinction within the medical profession, or nonmedical persons who have rendered signal service to The Medical Society of New Jersey or who have attained special eminence in scientific fields other than medicine. Nominations shall be submitted by recognized medical groups to the Committee on Honorary Membership for approval or disapproval, and the committee's action shall be transmitted to the Board of Trustees by December first. Nominations approved by the Board of Trustees shall be officially sent to the component county medical societies at least three (3) months before the annual meeting at which action is to be taken, and

the approval of a majority of the component county medical societies shall be required to validate the nomination before it can be submitted to the House of Delegates. (delete, ", and who") Nominees may be elected by a two-thirds vote of the House of Delegates (delete, "after having been recommended by the Committee on Honorary Membership,") provided the number of living Honorary Members does not exceed fifteen (15). Presentation of the honorary membership shall be made at the following annual meeting. Honorary Members shall have all the privileges of members, but shall not be members of the corporate body.

Standing Committees • • •

Finance and Budget

(Reference Committee "B")

DAVID B. ALLMAN, M.D., Chairman, Atlantic City

ANY report of the Committee on Finance and Budget prepared in advance of the end of the fiscal year must be tentative and general in character. Only after completion of the fiscal year (May 31) does it become possible to speak in precise terms of the year's finances.

From our point of view this has been a sound and satisfactory year, as we expect to demonstrate when the report on the current year's budget and the proposed budget for 1955-56 are presented at the opening session of the House of Delegates. A detailed report covering the period June 1, 1954 to April 15, 1955 will be made at the convention.

Publication

(Reference Committee "B")

J. LAWRENCE EVANS, JR., M.D., Chairman, Leonia

THE Publication Committee's best report is THE JOURNAL itself. In the calendar year 1954 THE JOURNAL published 532 pages of text and 624 pages of advertising, to a total of 1156 pages. The 532 pages of text break down as follows:

321	pages of Original Scientific Articles
104	pages of State Activities
30	pages of Editorials
22	pages of Book Reviews
22	pages of County Society Reports
14	pages of Announcements
8	pages of Woman's Auxiliary material
11	pages of other material
532	total

THE JOURNAL's balance sheet shows a net income of $32,189 from advertising, subscriptions and sale of journals during 1954. It cost $35,816 to print, bind and distribute THE JOURNAL. Additional editorial office expenses other than salaries amounted to $644, so that THE JOURNAL's expenses totalled $36,460. This shows a book loss of $4271. Thus it cost an average of 81 cents per member to put out THE JOURNAL.

During the year, Dr. Davidson returned as editor. While Dr. Davidson was in Washington, Dr. Rowland D. Goodman served as editor, and it is only proper that the Publication Committee here record its appreciation of Dr. Goodman's service. The "Golden An-

niversary" issue of THE JOURNAL (September 1953) is one monument to Dr. Goodman's enterprise, skill and interest. It was Dr. Goodman who conceived and carried through the changes in format which now make our JOURNAL more modern and more readable. Dr. Goodman's editorials reflected his own high standards of medical reportage and his own interest and skills in investigative and research medicine. THE JOURNAL is proud to continue the changes made by Dr. Goodman.

Dr. Davidson's return gives THE JOURNAL an editor of almost unparalleled experience in the field of medical journalism. It is good to have his familiar and skilled hand once more at the editorial helm.

Dr. Davidson's stimulating editorials continue to attract attention. Requests for permission to reprint one or another of these have come in from many parts of the country. The American Hospital Association's periodical "Trustee" asked to reprint the editorial on the decline of the house call. Our editor's unusual feature entitled "Authors' Clinic" has also won considerable interest. Requests have come from Massachusetts, from Hawaii and from numerous points in between for permission to reprint some or all of these items.

The Letters-to-THE JOURNAL page has developed as an outlet for the articulate member. The infrequent letters which we receive suggest that the general membership has few grievances with respect to Society operations. We continue to give more space to book reviews than do most state journals. In 1953 and again in 1954 we reviewed 67 books each year. Members have frequently expressed appreciation for this service.

THE JOURNAL has thus continued, in progressively enhanced fashion, as the effective organ of our Society and a postgraduate text for physicians of our state. We shall continue it as our effective agent of communication for the Society, and as a reflection of the professional attainment and contributions of our members.

Honorary Membership

(Reference Committee on Resolutions and Memorials)

ALDRICH C. CROWE, M.D., Chairman, Ocean City

NO NAMES have been submitted for honorary membership in The Medical Society of New Jersey. Therefore, it has not been necessary for the committee to meet this year.

Medical Defense and Insurance

(Reference Committee "D")

J. WALLACE HURFF, M.D., Chairman, Newark

WE REGRET it is not possible to publish our report at this time. The figures from the insurance companies are not yet available, and it is too early to make up any statistics on the returns of the questionnaire sent recently to the membership. However, a full and detailed report of the work of our committee will be presented to the House of Delegates at the Annual Meeting.

Medical Education

(Reference Committee "B")

FRANCIS M. CLARKE, M.D., Chairman, New Brunswick

THE aims of this committee, as spelled out in Annual Reports from 1950 to 1954 remain unchanged. To avoid diverting effort and attention from the National Medical Education Fund and from the development of plans for a Medical-Dental School, our Committee has engaged in no operating program of its own. We have, however kept in close touch with educational activities by other components of The Medical Society of New Jersey.

Much educational activity does take place all through the year. All hospital staffs are engaged in educational programs of great merit and quality. Organized courses of instruction have been given by various other agencies throughout the state. With this large number of local programs being conducted at the county and institutional levels, the need for the organizational and administrative function of the Committee has not been as great as in former years. In addition, the question of a State Medical and Dental school was before the public during the year. Efforts to obtain funds for a full time administrative staff for the Committee were not pressed in order not to confuse the issue. However, the need for such a full time administrative staff as outlined in previous reports, and particularly in the report of 1952, remains unchanged. Much duplication of effort throughout the state could be avoided by a well administered program by the Committee on Medical Education. It is the hope of the Committee that it may (now that no other large educational issues are before us) concentrate on developing an active program in the near future.

Annual Meeting

(Reference Committee on Miscellaneous Business)

JEROME G. KAUFMAN, M.D., Chairman, Newark

AT THE joint meeting of the committee with Section officers, the following points were stressed:

1. Sections are "*of* The Medical Society of New Jersey" and are in no manner connected with the specialty societies, although many physicians may be members of both groups.
2. Section programs should be geared for the average member and not for the specialist.
3. Section officers must be elected at the Annual Meeting sessions, and not at meetings of specialty societies.
4. Officers of specialty societies should not also be Section officers. Dual office holding tends to give the specialty society control of the Section and its program.
5. If similar or duplicate topics or speakers are planned, the Section program first received will be given preference.

The Sections on Anesthesiology, Orthopedic Surgery, and Pediatrics indicated they would not meet in 1955. Officers of these three sections will carry over to the 1956 Annual Meeting.

By petition, signed by over twenty ophthalmologists, the Section on Eye, Ear, Nose and Throat was separated into two Sections: Ophthalmology and Otolaryngology. At the time of the joint meeting last September the officers of the two Sections requested permission to hold a combined session, successive sessions in the same room, or simultaneous sessions in nearby rooms, so that those interested in both programs could attend. They did not feel that the request for separation represented the feelings of the majority. After discussion, it was concluded by the presiding officers, and agreeable to the officers of the two Sections that they would meet on different days in 1955. The officers of the two Sections are requested to submit a report at the close of the 1955 annual meeting to the committee on the results of the separate meetings and their recommendation for future conventions. They

were requested to confer among their own groups to resolve these matters.

The Section officers have cooperated splendidly. Their programs are aimed at the general membership. Copy was received on time for the early publication of the Advance Program mailed to the membership in January; and for publication in the final program. Following a suggestion made at the joint meeting, abstracts were obtained from the speakers. Such abstracts give the members a better idea of what the papers are about since titles sometimes do not give the full import of the subject matter.

At the 1954 Annual Meeting the committee conducted a survey of the technical exhibits. The survey was well received by the exhibitors and a study of the results revealed what we had felt for some time — the New Jersey meeting is one of the most popular among the exhibitors. It is well organized, and operates efficiently. The most consistent criticism of the exhibitors was the lack of interest by many physicians in the technical exhibits. The ratio of physicians at the meeting who take time to visit the exhibits and talk with the representatives is small. Receipts from the rental of the technical exhibit booths pay the full cost of the Annual Meeting. Since 1939 the committee has not had to ask the Society for any monies to finance the Annual Meetings. If technical exhibit booths were not rented, a registration fee of $10 would be necessary, or the Medical Society assessment would have to be increased $2.50 per member. If only for this reason, those who attend the meeting should show their appreciation and interest by visiting the technical exhibits and talking with the various representatives. We feel certain, however, that if the physicians would spend a little time in the exhibits they would find much to interest them. We urge the members who attend the Annual Meeting to visit the exhibits, both scientific and technical.

FUTURE ANNUAL MEETINGS

WITH more conventions being scheduled for Atlantic City each year, and with the A.M.A. returning each fourth year, the committee, with the approval of the Board of Trustees, *recommends* the following dates and places for annual meetings be approved.

1956 May 13 - 16, 1956 at Haddon Hall
(A.M.A. will meet in Chicago June 11 - 15, 1956)

1957 April 28 - May 1, 1957 at Haddon Hall
(A.M.A. will meet in New York June 3 - 7, 1957)

1958 May 18 - 21, 1958 at Haddon Hall
(A.M.A. will meet in San Francisco June 23 - 27, 1958)

1959 April 26 - 29, 1959 at Haddon Hall
(A.M.A. will meet in Atlantic City June 8 - 12, 1959)

Scientific Program

(Reference Committee on Miscellaneous Business)

JOHANNES F. PESSEL, M.D., Chairman, Trenton

THE regulations which your committee have set up for section programs, after several years of trial, have, we believe, finally taken hold and produced a program aimed at the general membership. Section officers have been most cooperative. Only minimal changes had to be made in the individual programs when reviewed as a whole. This year's scientific program will be interesting, timely, and instructive. It is our hope that all Section members will attend their meetings and give the essayists their whole-hearted support. It will encourage the speakers and make for a much better meeting.

Scientific Exhibit

(Reference Committee on Miscellaneous Business)

MARVIN C. BECKER, M.D., Chairman, Newark

THE 189th Annual Meeting of The Medical Society of New Jersey will have twenty-nine scientific exhibits. Of these, twenty will be by members of the Society and nine by out-of-state physicians. Three hundred and thirty-three feet of back-wall space has been allotted. Of this, 211 feet went to New Jersey exhibitors.

At a meeting of the Scientific Exhibit Committee, the application form was reviewed and recommendations for its improvement made. Experience has shown there is still need for further improvements to provide for absolute accuracy in the description of exhibits. This should facilitate the evaluation of exhibits and the allotment of space. At this meeting a study was made of the method of appraising exhibits and agreement was reached on an approach which, it was felt was equitable. Ways of encouraging exhibits by New Jersey physicians was the keynote of the meeting.

Advisory to Woman's Auxiliary

(Reference Committee on Miscellaneous Business)

LEWIS C. FRITTS, M.D., Chairman, Somerville

EARLY in the year the various programs of the Auxiliary were reviewed. With minor changes they were found to be in accord with the programs and procedures of The Medical Society of New Jersey. Considerable progress has been made toward the ultimate goal of complete coordination of Auxiliary activities with those of the Society.

The Woman's Auxiliary is always a ready medium of assistance to the Medical Society. The willingness of the ladies has been well proved, and their continued efforts in our behalf are deeply appreciated.

Welfare

(Reference Committee "E")

EMANUEL M. SATULSKY, M.D., Chairman, Elizabeth

THE Welfare Committee has continued its important function of screening the various activities of its subcommittees for the Board of Trustees. An innovation this year was the inclusion of each county society secretary as a member of this committee and a standing invitation to each county society president to attend the meetings.

At its organization meeting, the Welfare Committee approved reports of Special Committees on Cancer Control and on Maternal Welfare. Every Subcommittee reported. Among the items of special interest were the question of legally privileged communications between physician and patients, of corporate practice of medicine, of a *Membership Guide Booklet,* and expansion of the Woman's Auxiliary.

Throughout the year, the Welfare Committee had three meetings. All reports from Subcommittees and Special Committees were analyzed and reviewed. Recommendations thereon were relayed to the Trustees. Most of the Welfare Committee's recommendations were approved. The details will be found in the individual reports of the respective Special Committees and Subcommittees in the April 1955 JOURNAL.

I cannot let this opportunity pass without expressing my sincere thanks and appreciation to the chairmen and members of all Special and Subcommittees for their splendid efforts on behalf of our Society this year. It has been a privilege for me to have served the society as Chairman of the Welfare Committee.

Cancer Control

(Reference Committee "E")

H. Wesley Jack, M.D., Chairman, Camden

The Cancer Control Committee held regular sessions during the year, in conjunction with the Medical Committee of the American Cancer Society, New Jersey Division, Inc. Purpose of the joint meetings was to direct the cancer control program throughout New Jersey which is financially supported by the American Cancer Society. During the year this committee screened 136 projects for various phases of the American Cancer Society program in their 21 county chapters. The dollar value of these projects was $257,700.

The number of cancer clinics subsidized by this division during the year was 41. Three new clinics were added to our list: Newton Hospital, Newton; Medical Center, Flemington; and Mountainside Hospital, Montclair. One clinic was deleted from the list due to inactivity and lack of organization.

The September 1954 *Bulletin of the American College of Surgeons* lists 36 of the 41 clinics as meeting the standards set up by the College for approval. Regular monthly reports are received from all 41 clinics. It is expected that the five clinics not currently approved will receive the approval of the College at the time of their next inspection. A forty-second clinic at Millville Hospital, Millville, was approved by the Medical Committee and was added to our list in September 1954.

During the year the clinics received approval for the expenditure of $23,941 for new equipment and $700 for medical books. All of this within the provisions of Part I of The American Cancer Society program. In addition to these amounts, $50,769 was paid to the clinics under Part IV for nursing and clerical overhead and diagnostic services. In the year ending August 31, 1954, these clinics reported 22,446 visits by medically indigent cancer patients. Of these, 1752 were new referrals. The remainder were re-visits. For x-ray therapy, there were almost 11,000 visits. Of the 1752 new patients seen at these clinics, 908 (that is, 54 per cent) were diagnosed as having malignant disease.

As an aid to our program over 2 000 New Jersey physicians have indicated their willingness to conduct health maintenance examinations in their offices. This list is currently being revised and a new booklet is in preparation.

Special thanks are due to all who cooperated with the society by accepting the chairmanships of the Service and Education programs of the division and to all who have supplied professional speakers for lay meetings.

Maternal Welfare

(Reference Committee "E")

John D. Preece, M.D., Chairman, Trenton

The primary objective of the Special Committee on Maternal Welfare has always been the reduction of maternal mortality. In recent years attention has also been directed towards the reduction of neonatal mortality. Towards these two goals the committee has expended its efforts this year.

Through the cooperation of the Bureau of Maternal and Child Health, State Department of Health, the usual work of collecting statistics on maternal deaths has continued. Our field physicians have continued to give us excellent cooperation in this project. Individual reports on these studies have been given to hospital groups requesting them.

The pilot study on neonatal death rates, started last year, is being continued in an effort to get more statistics with which to work in the future.

The number one project of the committee this year has been a revision of *Hospital Standards for Maternity Departments* which were first published by our Society in 1946. New drugs and procedures have made it necessary for a revised set of standards to be compiled. As soon as the *Revised Standards* are approved, they will be distributed to the maternity units of all the hospitals in the state.

Subcommittees • • •

Legislation

(Reference Committee "E")

C. Byron Blaisdell, M.D., Chairman, Asbury Park

The subcommittee reorganized in Atlantic City at the end of last year's annual meeting with the feeling that its activities had been approved by the House of Delegates. It was, therefore, determined to continue the county keymen for informing legislative representatives, and not recommend an executive secretary to the committee. A *Plan for Cooperative Legislative Action* was sent with a kit to each of the county keymen for this year urging him to accept the responsibility for the effectiveness of the Society's service to legislators. This program is now in operation, and bulletins will be sent as heretofore with respect to legislation in which the Society is interested.

The committee was again saddened by the death of one of its members, Dr. Walter F. Phelan, who died suddenly on Christmas Eve, 1954. His loss is greatly felt, and his gentle and cooperative personality will be missed by the members of the committee who have worked with him over the past years. Dr. Louis S. Wegryn has been appointed from Union County by the President, to serve the balance of Dr. Phelan's term.

National Legislation

The committee supported the A.M.A. position on all matters of legislation coming before the 83rd Congress. These briefly were: (1) Expansion of the Hill-Burton Hospital Construction Act; (2) Extension of the Hospital Construction Act to 1960; (3) Lowering the medical expense tax deduction from 5 per cent to 3 per cent; (4) Extension of the doctor-draft law to 1955; (5) Establishment and development of the Department of Health, Education and Welfare; (6) Establishment of the Hoover Commission on organization of the executive branch of the government; (7) Establishment of the Commission on Intergovernmental Relations; (8) Transfer of Indian Hospital and Medical Services from the Department of the Interior to the Department of Public Health Services; (9) Bans against shipment of fire-works into states where their sale is illegal; (10) Federal charter for National Fund for Medical Education; (11) Permission for oral narcotic prescriptions under certain conditions and limitations. In addition to these measures, two major proposals were not acted upon by the 83rd Congress; (A) the Administration bill to streamline the Public Health Service grants to states; and (B) the Jenkins-Keogh bills to stimulate private pension plans. Opposed successfully was the inclusion of physicians in the Social Security amendments and (still alive and debatable) the government policy on medical care for veterans with non-service connected disabilities.

Quoting from an editorial in the *Journal of the American Medical Association*, we think the following is appropriate: "We may indulge in a bit of wishful thinking, but it would be helpful if the American people had more knowledge of the fact that the American Medical Association every year supports constructive legislation. The positive side of the story may not have blood and thunder news interest but it spells out a steady, continuing program in protecting the public health and welfare."

84th Congress

An excellent summary of President Eisenhower's proposals to this congress will be found in the February 1955 *Membership News Letter*. We find ourselves in agreement with (1) An attack on the problem of mental illness; (2) Proposals aimed at relieving the shortage of nurses; (3) Program of rehabilitation; (4) Greater flexibility by states in the use of federal grants-in-aid for public health services; (5) Establishing traineeships in public health and improving the service's status and survivorship benefits and; (6) supporting research on air and water pollution.

The A.M.A., and ourselves as well, are presumably still in opposition to the extension of veterans benefits to non-service connected disabilities, and to the proposed reinsurance of voluntary health insurance plans. Mrs. Hobby, Secretary of Health, Education and Welfare, has stated she anticipates less A.M.A. resistance to reinsurance. We shall know more after March 19, when the A.M.A.'s Legislative Committee and Board of Trustees shall have met in Washington.

Thus far no hearings have been held on any of the legislation introduced in the 84th Congress in support of or opposing the President's recommendations. These will be brought to the House of Delegates in the form of a supplementary report.

STATE LEGISLATION

ONLY one bill to which the Society was opposed was passed by the Legislature last year. This was S-282 which would have admitted inadequately prepared applicants for medical licensure to examination. Fortunately, and with the help of doctors, educators, and friends, the Governor vetoed this bill. It has been introduced again this year as S-90 and is being actively opposed by our Society.

Other bills of interest to the Society have been introduced. The Legislature adjourned on January 31, and is not reconvening until March 7. A report of our position on these measures will be brought to the House of Delegates in the supplementary report.

The committee has received great assistance at the A.M.A. level from the Washington Office of the A.M.A. through its weekly *Washington News Letter* and special bulletins. Dr. David B. Allman of Atlantic City, Chairman of the A.M.A. Committee on Legislation and a Trustee of the A.M.A., has been of inestimable help in keeping us apprised of the need for quick action on Washington legislation. The committee again extends its sincere thanks to the staff at the State Society Headquarters, especially to Mr. Nevin and Mrs. Madden, for giving quick service in the preparation of bulletins and getting out reports.

Public Relations

(Reference Committee "E")

SAMUEL J. LLOYD, M.D., Chairman, Trenton

THE Subcommittee on Public Relations has carried on the duties assigned to it. The shortened work-year has made completion of some projects impossible. Activities included *Project Coverage*: a state-wide local medical emergency coverage. The county by county listing of plans was published in full in the February *News Letter* and will not be spelled out again here. In general, this is working out well. However, *Project Coverage* will require supervision year after year to prevent relapse into its previous unsatisfactory status.

Another continuing project, *Membership Guide Booklet*, has proved to be a sizable chore. The format for this booklet and the material to be contained therein are under study. It is hoped that another year will see this publication in the printer's hands.

The publications sponsored by this committee continue to be well received. The *Quarterly News Letter* is now the *Periodic News Letter* sent out only when material is available and circumstances indicate. The *Membership News Letter* is to keep the society informed more quickly and easily than is possible with the larger and, necessarily slower moving JOURNAL. *Health Hints* are popular. *Junior Health Hints* are so popular that we must seriously consider having some other agency sponsor them. These *Junior Health Hints* absorb an excessive amount of Headquarters staff time.

An *Invitation to You* was developed during the year. It asked members to submit public relations problems and questions. Few replies were received.

Effort is being made to hold a state-wide

Public Relations Workshop with the hope that this may become an annual feature.

The Subcommittee recommended that a professional "estimate form" be developed. The Board of Trustees has filed this suggestion. Your Subcommittee believes that the possible "professional estimate" form be given publicity in the JOURNAL or in the *Membership News Letter*.

RECOMMENDATIONS

1. That county public relations chairmen be invited to attend meetings of the Subcommittee on Public Relations.
2. That a request be made to each county society for chairmen of county public relations committees to be granted some kind of tenure locally to pursue the problems over a longer period than one administrative year.

Medical Practice

(Reference Committee "E")

RUDOLPH C. SCHRETZMANN, M.D., Chairman, West Englewood

THE Subcommittee on Medical Practice met four times during the past year. The subcommittee's time was largely taken by the following six problems:

1. *Standing Orders for Public Health and Institutional Nurses.* The need for statewide regulations governing this was thoroughly discussed with the officers of the New Jersey State Nurses' Association. The committee favored a resolution of this problem on a county level. The county societies were advised to set up liaison committees to deal with the situation when and if it arises.

2. *Nursing problems in New Jersey hospitals* were discussed with nursing society officers also. We wished to lend support to the nursing profession in their efforts to improve nursing in our institutions.

3. *Medical Care Plan for clients receiving public assistance.* This was studied following a request by the State Welfare Department which asked that we consider the feasibility of a statewide fee schedule and explore ways of caring for the sick who were under Public Assistance. The committee studied the Montefiore Plan, the Philadelphia Plan and the City of Newark Plan to see if these were applicable.

The committee concluded that a statewide fee schedule is not feasible at this time. With respect to the care of Public Assistance clients, it was pointed out that there is already in operation a Medical Service Administration of New Jersey. This agency is prepared to administer any plan which would assure care for the medically indigent anywhere in the state.

4. *The corporate practice of medicine* was the subject of much thought. We held a joint meeting with the members of the Subcommittee on Legislation, our Medical Practice Subcommittee, and representatives from the New Jersey Radiological Society. The manifestations of the corporate practice of medicine as it affects radiologists were studied. Some tentative remedies were suggested. But much more study is required. Other joint meetings will be held before any concrete solution can be attempted.

At the request of the Trustees of The Medical Society of New Jersey, this Subcommittee initiated a survey to determine the extent of corporate practice of medicine in New Jersey. A questionnaire was sent to each member. The officers of the component county societies were also polled on pertinent questions relating to this subject. Conclusions await tabulation of the answers.

5. *Privileged communication* between doctor and patient was discussed. It was found that physicians in New Jersey do not enjoy a confidential relationship between patient and doctor in our law courts. It was decided to acquaint the doctors and public of this fact; to ascertain *via* a questionnaire the extent of violations of this relationship between patient and doctor; and, if possible, to find out whether such privilege should legally be extended to the doctors of New Jersey.

6. *Commercial insurance companies* are soliciting full participation of physicians in their insurance plans. Many problems attending

such full participation were discussed and further disposition of the problem was made by the Board of Trustees.

The Subcommittee wishes to express its sincere appreciation to the officers and Board of Trustees of the Society for their help and patient understanding of our many perplexities. To our secretariat goes our thanks for their efficient help. To his many faithful committee members the chairman expresses his personal gratitude for their loyalty and work well done. It was a privilege to have been of service to the Welfare Committee and the membership in general.

SPECIAL COMMITTEE OF THE MEDICAL PRACTICE COMMITTEE

Workmen's Compensation and Industrial Health

(Reference Committee "E")

ARTHUR S. MANGELSDORFF, M.D., Chairman, Bound Brook

DURING the past year the Special Committee on Workmen's Compensation and Industrial Health has been busy at meetings and with telephone conferences. One of the first items considered was the advisability of publishing a note on "The Cardiac in Industry." The Committee did not feel that this should be published without further clarification.

The booklet *Guiding Principles of Occupational Medicine*, prepared by the Council on Industrial Health of the American Medical Association, was reviewed and distributed to all county societies.

A meeting was held with the Medical Committee of the Newark Casualty Insurance Claims Managers Council to further discuss the problem of fees and cooperation. A report was submitted to the Board of Trustees.

Public Health

(Reference Committee "E")

KENNETH E. GARDNER, M.D., Chairman, Bloomfield

THE Subcommittee on Public Health was reorganized during the past year under the direction of Dr. Elton W. Lance, President of The Medical Society of New Jersey. To establish a more representative group, one member from each county society was appointed to the Subcommittee. The advisory committees were discontinued.

It was anticipated, of course, that from time to time problems would arise in various medical and surgical specialty areas. On these occasions, special committees would be created to deal with the problems. And during the year, special committees, in fact, were appointed to study problems connected with chronic illness, school health, conservation of vision, conservation of hearing, and a method of routine health maintenance examination. The committees for cancer control and maternal welfare were reconstituted as special committees to the Welfare Committee.

The subcommittee also arranged a joint meeting which included representatives of the Medical Society, the State Board of Health, and the State Board of Education to discuss the problem of immunization against poliomyelitis of all school children in New Jersey in the first and second grades, with parental consent. The final report to establish the success of the vaccine one year ago is not available at this time. Preparations are being made by the National Foundation for Infantile Par-

alysis to have sufficient vaccine available by April first. If the report is favorable, this vaccine will be furnished free for one year only.

The special study group on child safety and accident prevention has reported the distribution of a questionnaire regarding accident potential in the home to 3000 members of the Parent-Teachers Association representing a sampling of 30,000 population. The results were statistically analyzed by the National Safety experts. After a statistical analysis of this report (1) a pamphlet is to be written on accident prevention for lay people; (2) a pamphlet is to be written on accident prevention for physicians of the State of New Jersey; (3) articles on accident prevention are to be published in The Journal of The Medical Society of New Jersey; and (4) there will be an exhibit on accident prevention, including poisonings, treatment and control, sponsored by the Academy of Pediatrics at the 1956 annual meeting of The Medical Society of New Jersey.

The reports of each special committee of the Public Health Subcommittee will be found in the April 1955 Journal.

I would like to thank all the committee members who have given their valuable support to the work of the Public Health Subcommittee. I would also like to thank the members of the various county societies who attended our public health meetings.

SPECIAL COMMITTEES OF THE PUBLIC HEALTH COMMITTEE

Chronically Ill

(Reference Committee "E")

William H. Hahn, M.D., Chairman, Newark

After nearly two years of study, the Special Committee for Care of the Chronically Ill submits the following *recommendations* for implementation:

1. The establishment within each county society of a Committee for the Care of the Chronically Ill. The purpose of each county committee would be:

a. To study the problem of chronic illness in its own community, *i.e.*, the nature of chronic illness, the extent of chronic illness, the facilities available for the care of chronically ill patients, and what additional facilities, if any, are needed to provide an adequate overall program for the chronic sick.

b. To stimulate the development of any necessary facilities, to provide informational service about these facilities to patients and their families, physicians, social and health agencies and others.

c. To promote public understanding of the problems involved, and of possible methods of their solution; to offer leadership and cooperation in coordinating the efforts of the various health organizations, civic organizations, public authorities and other individuals and groups actively interested in the problem, and to promote sound community action.

2. That county committees consider the problem of chronic illness from the standpoint of:

a. Prevention

b. Care; Home Care, including such services as Visiting Housekeeper Services and Visiting Nurse Service, as well as medical care. Institutional care; Nursing Home, Hospital, Domiciliary.

c. Rehabilitation.

This consideration will require continuous inquiry into the best and most modern methods of discovery, care, treatment, cure, and prevention of chronic diseases. It will require contact and familiarity with the work of such organizations as the Division for the Control of Chronic Illness of the State Department of Health, the visiting nurse organizations, visiting housekeeper organizations, and the various organizations interested in health, such as cancer, tuberculosis, poliomyelitis, heart, crippled children and others.

3. It is suggested that county committees include representation of these organizations as well as county and municipal governments, hospitals, community chests and other interested organizations.

4. Each county committee shall make an annual report, and this material is to be made available to the State Committee. The State Committee shall act in a consultative and advisory capacity to the county committees.

Conservation of Hearing and Speech

(Reference Committee "E")

S. Eugene Dalton, M.D., Chairman, Ventnor City

The prime objective of this committee is to work towards measures that will prevent or cure deafness and help remedy speech defects. We have met jointly with representatives of the New Jersey Society of Ophthalmology and Otolaryngology. Our working plan is:

1. To act in an advisory capacity for conducting hearing tests for preschool and school children; also for the older age groups.

2. To aid in programs for the early detection and prevention of avoidable deafness.

3. To aid in the establishment of Hearing Research Centers and serve in an advisory capacity to Centers in designated areas throughout the state. These Centers will cooperate in carrying out these objectives. It was suggested that Newark, Trenton and Atlantic City would be appropriate sites for these Centers. The Henry C. Barkhorn Memorial Center (in affiliation with the Newark Eye and Ear Infirmary) is already in operation.

These Centers and other aspects of the general program are, of course, expensive operations. How will they be financed? Your Committee offers the following suggestions:

Financial support, including housing and equipment, may come from—

1. the hospital in the locality
2. private gifts
3. designated equipment from civic groups, industry and social agencies whose collaboration is desired
4. state aid for research projects
5. state aid for operational activities under chapter 85 of the Laws of 1954
6. aid from local boards of education under chapter 179, Laws of 1954
7. charges for services.

Centers should be established in connection with local voluntary hospitals. Policies should be formulated with medical consultation and the program conducted under supervision of appropriate medical specialists.

Conservation of Vision

(Reference Committee "E")

Robison D. Harley, M.D., Chairman, Atlantic City

Following the approval of the Public Health and Welfare Committees and the Board of Trustees, the Special Committee on the Conservation of Vision began work on the following projects:

1. To institute and direct an improved school vision program and develop better liaison between county superintendents, school physicians and school nurses.

   a. To give better instructions on methods of screening
   b. To give instruction courses for nurses through the county chairman of vision

2. Integration of school vision program by consulting ophthalmologists at county levels with eye health talks before PTA groups at all schools within the county.

3. To explore the possibility of obtaining an ophthalmologist to work at the state level with the Motor Vehicle Bureau.

4. To explore the possibility of obtaining an ophthalmologist to work at the state level with the Commissioner of Education.

5. To cooperate and function with the Commission for the Blind in setting up glaucoma survey clinics.

An Advisory Committee of three members was appointed to work with the Commission for the Blind on the glaucoma survey. They

are: Dr. Gerald Fonda, Northern Section; Dr. Irvin Levy, Central Section; Dr. Samuel Pole, Southern Section.

A liaison committee consisting of three members each from the Medical Society and the State Department of Education has been appointed to consider and make recommendations concerning the medical aspects of school health.

The Motor Vehicle Bureau is concerned with the question, "What eye defects are reportable to the Motor Vehicle Bureau?" The New Jersey Ophthalmological Society was advised to consider this problem and submit a recommendation to the Medical Society for appropriate action.

Work is continuing on the other projects with special emphasis on school health.

Routine Health Examinations

(Reference Committee "E")

Robert E. Verdon, M.D., Chairman, Cliffside Park

This special committee has been working to devise a form for history and physical examination which could be prepared with maximum effectiveness. The history form would be completed at home by the patient. The laboratory work would be done in the laboratory or the doctor's office, and the physical examination in the doctor's office. We are striving for a method which would be complete and convenient. We hope to achieve our objective in the not too distant future.

Further information on our plan will be available at the annual meeting at the scientific exhibit on Chronic Illness.

School Health

(Reference Committee "E")

Joseph R. Jehl, M.D., Chairman, Clifton

This committee has continued the study of making school medical services more uniform, with the ultimate aim of a standard which would be acceptable to all. With this in mind we have examined the report of the American Academy of Pediatrics which is very complete and excellent. It is our hope to condense this into a definite and specific format for use in this state.

The formation of a coordinating committee composed of the chairmen of Vision, Health, and School Health to work with the Department of Education representatives has been accomplished, and we anticipate that by coordinating our efforts to bring our respective aims to fruition.

Special Committees • • •

Emergency Medical Service, Civil Defense

(Reference Committee "D")

R. Winfield Betts, M.D., Chairman, Medford

During the past year this Committee concerned itself with the apparent apathy of the members of the medical profession toward the civil defense effort. Numerous meetings have been attended by members of the Committee, in this and in nearby states. Physicians and officers of the Civil Defense Organization in this and other states have been interviewed and the following conclusions have been reached by this Committee.

1. The "apathy" is only apparent as far as the medical profession is concerned. Physicians as a group are tired of spending their few free moments attending meetings at which nothing is accomplished. They are "fed up" with formulating plans, organizing emergency units and training emergency personnel only to have a higher headquarters nullify their efforts by finally sending out an S. O. P. saying in effect "You have done this the wrong way. Now do it our way." Physicians at large have adopted the attitude: "When the high brass has finally decided what they want done, we will do it." We have found the physicians in New Jersey keenly aware of their responsibility to the public, and more than willing to do their share when someone decides what they are to do.

2. The Medical Advisors of the State Civil Defense Organization are well informed on the medical aspects of civil defense. However, the gap is stupendous between the great store of knowledge accumulated by these advisors and the meager amount of knowledge allowed to trickle through to the physician in the local civil defense organization. There has been a noteworthy lack of dissemination of information from the top down. It is imperative for the physician who is to work with disaster organizations to be well informed on the latest technics, uniform procedures, effect of weapons and so on. The public expects their physicians to be so informed. Since the publication of "The New Jersey Plan for Medical and Health Preparedness" a few years ago, few of the promised manuals have been forthcoming. For instance: the basic unit of the CD Medical Organization is the FAMP. One of the first manuals promised was the "Training Manual for FAMP Teams." This has not been published, nor have most of the others promised by the "New Jersey Plan." How can units be trained in a uniform manner, and be expected to work together in mutual aid, unless a uniform training procedure be followed?

RECOMMENDATIONS:

1. That space be offered the medical advisors to the State Civil Defense Organization in the Journal of The Medical Society of New Jersey for the regular publication of news of interest to physicians connected with Civil Defense. Latest methods of therapy; progress in obtaining emergency equipment; work being done in other states; progress at the state level in New Jersey — all are of interest to the physician reader of this Journal. All of us are concerned with civil defense.

2. That program time at the next Annual Meeting of The Medical Society of New Jersey be alloted to medical aspects of civil defense. This policy has been followed by other states with notable success.

3. That the President of this Society request the Director of Defense of New Jersey to increase his medical staff with full or part-time, trained medical men whose sole function would be to perfect the medical organization of civil defense in this state in all of its aspects. We understand that funds are available for this purpose but have not yet been used. It is inconceivable in a state of this size (with the many retired competent medical officers from all branches of the Services who live here) that men who are both willing and competent cannot be found to provide full or part-time services.

4. That the President of this Society offer the Director of Defense the services of the many willing and competent members of this Society to assist in the early completion of an efficient and competent medical organization. Efficient medical care cannot be given the citizens of this state without prior planning. We physicians are the ones who will be criticized if such care is not forthcoming. Let us not put off until next year that which should have been done years ago.

Medical Research

(Reference Committee "D")

Ray E. Trussell, M.D., Chairman, Flemington

The Committee on Medical Research functions primarily in an advisory capacity. This year it concerned itself chiefly with a request from the Society to consider the problem of procedures for determining alcoholic intoxication.

After thorough discussion and review the following conclusions were reported to the Trustees:

1. The available instruments for estimating blood alcohol levels by analysis of expired air if properly used and interpreted are reasonably reliable. The Drunkometer seems to be preferred on the basis of tests performed in the State Department of Health. It is in widespread use nationally. Eleven of these instruments have been purchased for the State Police and personnel are being instructed in their use.

2. The one court decision reversal in New Jersey when the Drunkometer was used occurred in a situation where the blood alcohol level was determined by improper laboratory technic.

3. The legislation in effect in New Jersey conforms with national recommendations and is basically adequate with two possible exceptions.

a. Placing more importance on individuals whose blood alcohol level is estimated to be from 0.1 to 0.15 milligrams per cent rather than including them in the broader "questionable" group with levels from 0.05 to 0.15 milligrams.

In connection with this point the following from a letter from Dr. Walton Van Winkle, Director of Research of Johnson & Johnson, is in order:

> I am particularly sympathetic with the criticism offered on New Jersey law with respect to emphasis given persons with blood alcohol levels between 0.1 and 0.15 per cent. I am afraid, however, that no reliable test has ever been devised to separate "safe" from "unsafe" drivers in this category or to determine whether such a driver is "under the influence" of alcohol. Usually the person with a blood alcohol level above 0.15 per cent shows measurable impairment of motor functions and simple tests can demonstrate this. However, those with lesser levels of blood alcohol frequently show little or no easily measured motor impairment. Their difficulty is impairment of "judgment," a faculty for which we lack adequate objective measurement. Nevertheless, I would surmise that impairment of this faculty is responsible for more motor vehicle accidents than obvious impairment of motor function. Here is an area where research is needed; thus I would be at a loss to know what to suggest in the way of "emphasis" on drivers in the "twighlight" range of blood alcohol concentration. If legislation is proposed in this area, it should be critically examined for practicability of enforcement and to be sure that motorists will not be convicted unjustly.

b. Tightening up on the voluntary nature of the test. At present the individual's consent is required. (The Committee as a whole expressed no opinion regarding this aspect of the problem.)

The Committee recommended, and received approval, that the problem be considered as primarily (a) legal: and therefore of concern to the legal and legislative committees, and (b) educational: to be approached under sponsorship of The Medical Society of New Jersey. Three methods of imparting education have been approved and are in the process of realization:

1. Each county medical society to devote all or part of a meeting to a program on the subject. This project has been initiated.

2. An exhibit at the Annual Meeting displaying "Testing the Drinking Driver." (Booth No. 1 of the Scientific Exhibits).

3. An authoritative and step-by-step description of how the practicing physician can deal most effectively with the problem be sought for publication in The Journal.

Medical School

(Reference Committee "D")

Stuart Z. Hawkes, M.D., Chairman, Newark

The Medical School Committee terminated several years of strenuous effort to have a Medical School in New Jersey, during the past year. It was considered essential by state officials to submit the expenditure of monies to a popular referendum for establishment of the School. The bill for this referendum was signed in September, 1954 and the question appeared on the ballot in November. The question did not receive enough support for passage.

Unusual support was received from many organizations in New Jersey. The New Jersey State Dental Society was fully cooperative and helped in financing the effort. The Woman's Auxiliary to the Medical Society was exceptionally helpful. Many members of our Society in each County were responsible for organizing the educational campaign locally. To all these a vote of thanks is due from our Society.

Physicians Placement Service

(Reference Committee "D")

Marcus H. Greifinger, M.D., Chairman, Newark

The Physicians Placement Service has continued its policy of listing physicians desiring locations in New Jersey, and information regarding communities in need of additional physicians. Summary reports containing all pertinent information have been prepared at three-month intervals and distributed to all interested parties who contacted the Placement Service.

In addition, names of registrants were forwarded to physicians in need of assistants or associates and to industrial organizations looking for additional medical personnel. During the year ten members appealed to the Placement Service for assistance in obtaining assistants or associates.

Almost without exception during the past year, physicians and communities requiring additional medical personnel sought to obtain the services of general practitioners. The majority of registrants have indicated a desire to specialize.

In the past year, 123 physicians registered with the Placement Service of whom, 17 located in New Jersey, 20 located in other states, and 29 failed to reply to follow-up communications, leaving a total of 27 still on the active list. Forty-eight communities were carried during the past year as areas in need of physicians. Four reported that existing vacancies have been filled, and 3 new areas have been added to the original list, for a total of 47 communities still seeking physicians.

All services connected with the Placement Service are provided without cost to the physicians or to the communities. The work is done by members of the office staff as part of their regular duties. The actual cost is small but the benefits derived by both physicians and communities are great.

Medical-Surgical Plan of New Jersey

(Reference Committee "C")

The Board of Trustees

INTRODUCTORY

MEDICAL-SURGICAL Plan had a total of 481,592 contracts in force as of December 31, 1954 covering an estimated total of 1,196,804 persons. This compares with a total of 1,183,336 persons estimated to be enrolled at December 31, 1953—representing a net growth of about 13,500 persons during the year.

The Plan's total earned premium for the year was $15,864,136.61. The total incurred claim payments for the year were in the amount of $13,991,591.90 representing 88.2 per cent of earned premiums. Total Plan operating expenses for 1954 were $1,774,565.38 representing 11.2 per cent of total earned premiums for the year.

After all adjustments for interest on investments, profits on sale of investments, changes in value of investments, reserves for non-admitted assets, et cetera, the Plan was found to have added to reserve the sum of $136,564.89 during 1954.

At the end of 1954, total Plan reserve was $3,547,315.70. This reserve, when measured in terms of contracts and persons at risk, is considerably less than the average reserve of most comparable plans and less than the optimum desirable reserve for such a Plan.

The Plan made aggregate payments of $600.00 or more to each of 3,155 physicians for eligible services rendered persons enrolled in Medical-Surgical Plan during 1954. The total number of people served by the Plan during the year was 149,486 and the total number of eligible services for which Plan payment was made (both primary and auxiliary services) was 228,006. A table of comparison of 1954 with prior years of operation is appended to this report (Appendix A).

NEW SUBSCRIPTION CONTRACT

PROPOSALS concerning the Plan's projected revised Subscription Contract will be presented to the House of Delegates in a Supplemental Report of the Board of Trustees of Medical-Surgical Plan which will be presented to the opening session of the House of Delegates at its meeting in April, 1955.

PROPER UTILIZATION OF PLAN SERVICES

REPRESENTATIVES of Medical-Surgical Plan and Hospital Service Plan have met with representative physicians and hospital administrators in certain areas of the state during the past year to discuss with them problems related to the proper utilization of medical and hospital services as provided in the respective Subscription Contracts of the two Plans.

Over-utilization of these services is a serious factor affecting the financial experience and ultimately the Subscription Rates of both Plans. The medical profession and hospital administrators have a vital stake in helping to control excessive utilization and increasing claim costs, in order that the contracts may continue to be priced within the range of those for whom this service is primarily intended and who, generally speaking, need it most.

It is proposed, during the coming year to hold further conferences of this kind with physicians and hospital administrators, probably on a regional basis.

PARTICIPATION OF PHYSICIANS

MEDICAL-SURGICAL Plan enjoys the voluntary formal participation of more than 80 per cent of all physicians practicing in New Jersey. These physicians participate in Medical-Surgical Plan because they recognize that the Plan is their own creation, and that a majority of the Board of Trustees of the Plan must always consist of members of the medical society. Furthermore, the physician knows that Medical-Surgical Plan is organized and operated on a non-profit basis, for the sole benefit of the patient and the physician. A table of comparison of participation of physicians for 1953 and 1954 by counties is appended to this report (Appendix B).

FIELD SERVICE PROGRAM

IN MARCH 1954, Medical-Surgical Plan inaugurated a "Field Service Program" for physicians and their office aides. The purpose of the program is primarily to provide infor-

mation as to claim procedures and reporting requirements of the Plan, and to assist physicians in solving problems arising in the course of their individual dealings with the Plan.

Thus far this program has been extended through Bergen, Passaic, Hudson, Essex and Union Counties. The Plan is contemplating engagement of additional field service representatives in order to provide this service to the rest of the state.

In each county in which the work has been undertaken, there has been prior consultation and clearance with the Advisory Committee to Medical-Surgical Plan representing the local County Medical Society.

A principal feature of this program has been a schedule of visits to local general hospitals and the establishment of an information desk at the hospital on the day on which the visit has been scheduled. Our representative has also visited individual physicians to some extent and has made contact with physicians' secretaries in order to acquaint them with the administrative requirements of the Plan. Lectures and classroom work have also been presented at vocational institutions for the students in medical secretarial courses.

At the end of January 1955, information sessions have been held at 51 hospitals in the five counties listed above, and a total of 1555 physicians have been interviewed in the course of these sessions.

A careful record has been kept of the comments suggestions and complaints registered by physicians at these sessions. The Plan is better informed concerning the current reaction of the physicians regarding the Plan's policies and procedures. The comments made by physicians and their office personnel relative to the value of this service has been very favorable, indicating the desirability of extending this service to the rest of the state.

RESOLUTION OF HOUSE OF DELEGATES OF STATE MEDICAL SOCIETY 1954 REGARDING OUT-PATIENT SERVICES

THE House of Delegates of The Medical Society of New Jersey in May 1954 adopted a resolution requesting "That the same fee be allowed by the Medical-Surgical Plan for emergency surgical services when performed in the private physician's office as allowed in the out-patient department or the emergency ward of the hospital."

This resolution refers to the provision of Section VII of the current Subscription Contract which limits Plan payment to a maximum of $25 for emergency surgical services rendered outside of hospital within the first 48 hours following an accidental injury; whereas if the same services were rendered in a hospital out-patient department, maximum payment would be governed by the Schedule of Payments with respect to the specific procedure or procedures that were performed.

This resolution was referred to the Fee Committee of Medical-Surgical Plan which gave consideration to the problem on June 8, 1954 and submitted a report to the Board of Trustees on June 22, 1954. The Board approved this resolution in principle and directed that an actuarial study be made as to the cost of applying this principle to the current Subscription Contract, following a review with legal counsel of the question of the relationship of this resolution to the provisions of the Subscription Contract.

The consideration of this proposal has been merged into the study of the Plan's proposed new Subscription Contract which would provide that the maximum Plan payment for emergency surgical services rendered in the first 48 hours following an accidental injury — and when such services are rendered outside of hospital—shall be increased to $50. The Plan believes that payment according to the Schedule of Payments up to a maximum of $50 for such services outside of hospital will result in the physician realizing the same payment for practically all such services as he would receive if such services had been rendered in hospital or the out-patient department of the hospital.

On November 7, 1954, Medical-Surgical Plan reported to the Board of Trustees of The Medical Society of New Jersey that "Any further expansion of coverage for office services would require an increase in Contract Premium Rates. The Plan cannot recommend that this scope of coverage outside of hospital be so increased under the current Contract."

PLAN POLICY IN RELATION TO SUBSCRIBERS HOLDING ADDITIONAL ACCIDENT AND HEALTH INSURANCE

FREQUENT inquiries are made of Medical-Surgical Plan as to whether a Participating Physician attending a Subscriber whose earned income qualifies him for service benefits may make an additional charge in the event the Subscriber realizes cash benefits from other insurance policies.

The present Subscription Contract of Medical-Surgical Plan contains no reference to this contingency but merely provides that "payment by the Plan to Participating Physicians shall be deemed to be in full for eligible services if the annual income of the Subscriber at time services are rendered is not more than $5,000."

The suggestion has been made that, in drawing the new Subscription Contract, the Plan might provide that if the Subscriber carries additional health and accident insurance the service benefit agreement in that instance would be waived. Those who have asked for this provision in a new Subscription Contract apparently feel that if additional benefits are available to the Subscriber, the physician should be free to render an additional charge for his services.

The Plan has considered this problem, but the Board of Trustees has decided against incorporating any new contract provision that would take special cognizance of multiple insurance policies. The following points have been taken into consideration:

1. Cash benefits derived from an insurance policy are not considered to be "income."
2. Sickness or disability is usually accompanied by loss of income and the incurring of unusual debts and obligations. Hence, any cash benefits that may be available to people of moderate income at a time of temporary hardship should be available for the unusual expenses encountered by the family.
3. The situation constitutes a problem only in respect to Subscribers whose income is less than $5,000. It seems doubtful whether any substantial number of Subscribers whose incomes are within this level would have sufficient income to purchase more than one contract of this kind. It would seem that the size of this problem has been exaggerated.
4. The declared purpose of Medical-Surgical Plan is to provide a fair, average level of payment for services that are covered by the contract when rendered people whose incomes are within the income level for service benefits. If the Plan's Schedule of Payments does represent a fair, average payment for people of low and moderate income, there would seem to be no justification for the Plan compromising the service benefit principle in order to permit the collection of additional payments in cases where there is multiple coverage.

SERVICES RENDERED BY GROUP CLINICS

At its annual meeting in May 1954, the House of Delegates of The Medical Society of New Jersey adopted a recommendation: "That group clinics could do much to relieve overcrowding in hospitals if their medical and surgical treatment were endorsed by the Medical-Surgical Plan and other Insurance Plans."

The Plan has brought to the attention of the Board of Trustees of The Medical Society of New Jersey under date of November 7, 1954 the fact that the following services of an eligible physician rendered to an eligible person outside of an approved hospital are eligible for Plan payment under the terms of the Plan's Subscription Contract:

1. Eligible surgical services (not medical or obstetrical services) of an emergency nature, occasioned by an accidental injury, rendered within 48 hours after the accident. Plan payment would be in accordance with the Plan's Schedule of Payments but not exceeding $25 in connection with any one accident.
2. Services for removal of tonsils and/or adenoids.
3. Obstetrical services in eligible cases under the Family Subscription Contract.

Such services are eligible when rendered in a group clinic by an eligible physician.

ELIGIBILITY OF BLIND PERSONS AS A GROUP FOR BLUE CROSS-BLUE SHIELD COVERAGE

The House of Delegates of The Medical Society of New Jersey, at its annual meeting in May 1954, referred to Medical-Surgical Plan and Hospital Service Plan of New Jersey a request of the State Commission of the Blind to the effect that "it would appreciate any effort by the Medical Society toward making blind persons (as a group) eligible for benefit of the Hospital and Medical-Surgical Plan."

In view of the fact that this suggestion raises questions concerning enrollment policies and since the enrollment of Medical-Surgical Plan is handled through the facilities of Hospital Service Plan, this problem was jointly considered by the two Plans and the following observations have been communicated on November 7, 1954 to the Board of Trustees of The Medical Society of New Jersey:

1. Group Enrollment is limited to persons at place of employment or to such groups as lawyers, ministers, and physicians, because, when enrolled as a group, they afford a cross section of risk, making possible a lower Contract Rate than is practical under non-group enrollment, where selection against the Plan is greater.
2. The blind as a group not only do not afford cross section, but actually are a sub-standard group in which (in accidental injuries for example) the risk might be higher even than in non-group enrollment.
3. The Plan is not legally in position to give lower rates on a discriminatory basis so far as the remainder of the subscribers are concerned.
4. Possibly the matter of protection for the blind, as a group, should entail study along the lines applicable for other present uninsurable risks, such as the over-age group, the chronically ill, the unemployed and the indigent.

APPORTIONMENT OF AVAILABLE PLAN BENEFIT IN A SURGICAL CASE

In May 1954, The House of Delegates of The Medical Society of New Jersey adopted the following reference committee report relating to the subject of "Apportionment of Available Surgical Benefits:"

1. Any physician who assists in a medical, surgical, or obstetrical procedure is entitled to receive a fee commensurate with the services he renders.
2. The determination of eligibility of an assistant in a medical, surgical, or obstetrical procedure shall be the direct responsibility of the particular hospital service concerned.
3. It is the opinion of the committee that the fee schedule as listed by Medical-Surgical Plan for a surgical procedure is an all-inclusive fee, and does not represent solely the fee for the operative procedure alone. Therefore, the committee recommends that the total fee for the procedure be reapportioned, and that a new schedule of fees be established to provide payment for adequate and active pre- and postoperative care and for the technical assistance at the operative procedure itself as well as for the operative procedure. Nothing in the foregoing shall be interpreted to imply any change in the original fixation of responsibility of the attending surgeon for the care of the patient.
4. Each physician who participates actively in the care of a patient shall send his bill for services separately to Medical-Surgical Plan for payment.

In June 1954, The House of Delegates of the American Medical Association unanimously approved the following resolution submitted by the New Jersey delegates:

RESOLVED, That the House of Delegates of The American Medical Association approve the principle that a Blue Shield plan may make separate payments to eligible physicians who render services to an enrolled patient from the maximum scheduled payment available for such services, under the following circumstances: (1) That on certification of the operating surgeon, the scheduled amounts available for services rendered may be paid by the plan to a physician other than the operating surgeon provided that such other physician has properly rendered such services; (2) That each physician submit his individual report and charges to the plan according to the services rendered the patient; (3) That the plan make separate payment for the services of each physician; and (4) That the plan notify the patient of each payment made by the plan.

On September 26, 1954, The Board of Trustees of The Medical Society of New Jersey referred the action of the House of Delegates of The Medical Society of New Jersey to the Plan "for implementation as rapidly as possible and in accordance with the resolution adopted by the American Medical Association."

The Board of Trustees of Medical-Surgical Plan voted, on October 26, 1954 to poll the Participating Physicians with an appropriate communication and return post card.

Accordingly, under date of November 12, 1954, Medical-Surgical Plan of New Jersey circulated a letter and postcard questionnaire to each of the 5169 New Jersey physicians who are Participating Physicians in the Plan, asking each Participating Physician to indicate approval or disapproval of a "procedure for apportionment of Plan payment among physicians participating in a surgical case, as recommended by The Medical Society of New Jersey," and to indicate the county in which he practices.

At the request of the Board of Trustees of The Medical Society of New Jersey, a report has been compiled on the results of that poll, as of January 15, 1955. The results of the poll as submitted to the Medical Society is appended to this report (Appendix C).

The feasibility and method of implementation of the resolution are under review by the Plan. Further reference to this matter will be made in the Supplemental Report to the House of Delegates.

CONCLUSION

The Board of Trustees of Medical-Surgical Plan takes this opportunity to express its

appreciation to the Participating Physicians whose steadfast support and cooperation have made possible the continued service and development of the Plan.

The Board also wishes to express its appreciation to Hospital Service Plan of New Jersey for their continued services. Finally, a word of gratitude is extended to the staff of Medical-Surgical Plan for loyal and devoted services rendered.

APPENDIX A

SUMMARY OF OPERATIONS

Year Ended December 31	Earned Subscription Income	Claims Incurred		Operating Cost	Persons Enrolled End of Period
		Amount	% of Income	% of Income	
1942	11,148	5,395	48.4	51.1	4,131
1943	74,498	49,562	66.5	23.9	16,015
1944	187,708	135,605	72.2	18.9	30,427
1945	326,530	208,288	63.7	17.5	49,441
1946	540,227	370,576	68.6	16.8	88,088
1947	947,945	681,922	72.0	17.1	143,700
1948	1,524,814	1,203,651	79.0	15.0	236,604
1949	2,545,518	1,979,542	77.8	13.8	353,827
1950	5,252,060	4,278,098	81.5	12.9	499,882
1951	8,031,305	6,527,374	81.3	10.9	669,906
1952	10,952,158	8,720,257	79.6	10.8	997,303
1953	14,916,204	12,715,442	85.2	9.6	1,183,336
1954	15,864,137	13,991,592	88.2	11.2	1,196,804

APPENDIX B

REPORT ON PARTICIPATING PHYSICIANS — MEDICAL-SURGICAL PLAN OF N. J.

County	December 31, 1953 Total Eligible Physicians	P.P.	% P.P.	December 31, 1954 Total Eligible Physicians	P.P.	% P.P.	% Increase Decrease
Atlantic	197	161	81.5	201	170	84.6	+3.1
Bergen	632	461	73.2	669	480	71.7	—1.5
Burlington	112	87	76.8	117	95	81.2	+4.4
Camden	365	322	88.4	364	318	87.4	—1.0
Cape May	54	46	86.8	54	47	87.0	+0.2
Cumberland	89	79	88.9	92	82	89.1	+0.2
Essex	1567	1281	81.5	1551	1281	82.6	+1.1
Gloucester	83	66	80.7	89	72	80.9	+0.2
Hudson	724	572	79.6	712	566	79.5	—0.1
Hunterdon	45	37	81.4	48	41	85.4	+4.0
Mercer	354	307	87.3	366	309	84.4	—2.9
Middlesex	275	223	81.8	279	228	81.7	—0.1
Monmouth	292	230	79.0	298	236	79.2	+0.2
Morris	208	172	82.8	215	179	83.3	+0.5
Ocean	64	49	75.0	64	51	79.7	+4.7
Passaic	518	421	81.2	526	419	79.7	—1.5
Salem	46	38	86.4	47	39	83.0	—3.4
Somerset	94	76	81.5	99	79	79.8	—1.7
Sussex	36	28	77.8	38	30	78.9	+1.1
Union	580	410	71.3	580	413	71.2	—0.1
Warren	42	35	85.4	45	38	84.4	—1.0
Total in New Jersey	6387	5101	79.9	6454	5173	80.2	

NOTE: As of December 31, 1954, there were 142 physicians presently located outside the State of New Jersey who are maintaining Participating Physician agreements with Medical-Surgical Plan. To be a Participating Physician an eligible physician is required to hold a license for the practice of medicine and surgery in the State of New Jersey. Hence the grand total of all physicians listed with the Plan as Participating Physicians, as of December 31, 1954, was 5315.

APPENDIX C

REPLIES TO QUESTIONNAIRE ON APPORTIONMENT OF AVAILABLE SURGICAL BENEFIT

63.6% or 3285 out of 5169 Participating Physicians in New Jersey have replied as follows:

County	Total Eligible	Total Participating	Total Reply	% of P.P.'s Reply	Approved	Disapproved
Atlantic	200	169	98	58.0	80	18
Bergen	666	480	322	67.1	298	24
Burlington	117	95	53	55.8	40	13
Camden	363	318	164	51.6	122	42
Cape May	55	47	29	61.7	27	2
Cumberland	92	82	55	67.1	52	3
Essex	1551	1283	843	65.7	763	80
Gloucester	87	71	48	67.6	44	4
Hudson	711	565	322	57.0	291	31
Hunterdon	47	40	28	70.0	25	3
Mercer	363	309	196	63.4	96	100
Middlesex	278	230	179	77.8	153	26
Monmouth	298	236	144	61.0	122	22
Morris	214	178	122	68.5	103	19
Ocean	64	51	38	74.5	35	3
Passaic	521	417	234	56.1	208	26
Salem	47	39	26	66.7	25	1
Somerset	108	79	50	63.3	48	2
Sussex	37	30	25	83.3	25	—
Union	580	413	283	68.5	258	25
Warren	44	37	23	62.3	18	5
	6435	5169	3285	63.6	2836	449

54.9% of all Participating Physicians in New Jersey have approved the proposal, with 8.7% disapproving. 44.1% of all eligible Physicians in New Jersey have approved the proposal, with 7.0% disapproving.

Medical Service Administration of New Jersey

(Reference Committee "C")

BOARD OF GOVERNERS

THE activities of Medical Service Administration of New Jersey during 1954 have been limited to the operation of the City of Newark Medical Plan.

This is a reimbursement plan rather than an insurance plan, and provides payment on a fee-for-service basis for services rendered by physicians of the patients' choice for care of eligible persons confined to their homes by illnesses, and is designed to meet the needs of the indigent and medically indigent of the City of Newark.

The Plan continues to successfully demonstrate the cooperation of an official health agency with a voluntary agency controlled by the medical profession in helping to solve the problem of medical care of the indigent and medically indigent.

Medical Service Administration, which is organized for state-wide service, is used only in Newark and only for general assistance payments, although set up as an efficient agency to handle payments to physicians in all categories of welfare assistance, and which may readily be extended to other municipalities.

The following table delineates the experience of the Plan over a seven year period, from 1948 to 1954 inclusive, (statistics from 1944 to 1947 are listed in previous reports) showing actual costs and depicting the changing economy.

In interpreting this table, may we remind you that the indigent are those whose names appear on the welfare rolls of the City of Newark and that the medically indigent are those who, in the opinion of the Social Service Bureau of the City Board of Health, while having a sufficient income to meet the routine cost

INDIGENT (RELIEF) PERSONS

Year	1948	1949	1950	1951	1952	1953	1954
Mean number of persons on Welfare Rolls during year	4274	7986	7804	4977	3794	3500	5273
Number of cases* during year	——	——	——	——	——	1481	1640
Value of approved services	$8,589.50	$12,046.00	$13,092.00	$9,105.00	$6,726.50	$5,003.00	$5,731.50
Cost per capita of Relief Load per year	2.00	1.51	1.50	1.83	1.77	1.48	1.08
per month	0.167	0.126	0.125	0.152	0.147	0.123	0.09
Cost per case per year	——	——	——	——	——	3.378	3.494
per month	——	——	——	——	——	0.281	0.291

MEDICALLY INDIGENT CASES*

Number of cases during year	3283	4155	4446	3450	3409	2648	3315
Value of approved services	$12,775.50	$15,119.50	$15,298.50	$13,705.50	$11,366.00	$8,579.50	$10,764.00
Cost per case per year	3.89	3.639	3.441	3.972	3.334	3.24	3.247
per month	0.324	0.303	0.287	0.331	0.278	0.27	0.27

*The word "case" means family as distinguished from "person" referred to under report on number of indigent on relief rolls.

of a satisfactory standard of living, do not have sufficient income to pay for adequate medical care. Since the only fixed, or well-defined group are the indigent, the cost per capita in this report is limited to the indigent group. It is impossible to estimate the size of the medically indigent population. It must be borne in mind that medical indigency is a variable condition depending on the character and severity of the illness and the financial resources of the family.

As presented, the figures pertaining to the medically indigent load consist only of those medically indigent persons classified as medically indigent when requesting medical services, hence their costs are depicted on a cost per case basis only, rather than on a per capita basis.

The Plan has operated very smoothly in this past year. The relief load increased approximately 33 1/3 per cent and the claims for relief cases have increased approximately 12½ per cent above those of 1953. The cost per capita of relief load has decreased from $1.48 per year in 1953 to $1.08 per year in 1954.

A sudden drop in employment during the last two months of 1954 accounts for the higher percentage of persons on welfare rolls as compared to the 12½ per cent increase in indigent claims for 1954. It will be noted that, though the value of the claims for the indigent or persons on welfare rolls, increased but 12½ per cent, the claims for the medically indigent increased approximately 20 per cent. The number of *Welfare* "cases," or families, visited in 1954 was increased 10 per cent over that of 1953 as compared to an increase of 30 per cent of *medically indigent* cases.

Medical Service Administration has handled reimbursement for care of the indigent in Newark since 1943 and for care of the medically indigent since 1944. Before this plan went into effect, home care was provided by salaried city physicians. The present system is much more efficient and economical and has operated to the satisfaction of patients, physicians, and city officials. The standard of medical care is higher and the costs to the municipality are less than under other systems. The greatest financial saving is due to the fact that under such a plan, many people are cared for at home and a fewer number of people are hospitalized.

The Board of Governors now has before it for consideration a suggested amendment to its Certificate of Incorporation, approved by the Board of Trustees of The Medical Society of New Jersey, with reference to the declared purposes of the corporation which are primarily to "assist selected groups of persons to secure medical and surgical services" . . . by plans or arrangements with Governmental authorities at Federal, State or lower level, on a non-profit voluntary basis which

preserves the patient-physician relationship and allows free choice of physician and patient . . . and . . . "to act as a medium or agency for Governmental authorities . . . for transmittal of payments to such physicians for such purposes" . . . and . . . "to carry out and perform purposes approved by The Medical Society of New Jersey for purpose of making such medical and surgical service rendered by such physicians available to individuals and groups not eligible as insurable risks or who are not able to pre-pay premiums for obtaining insurance protection or service benefits against illness."

Medical Service Administration of New Jersey has demonstrated its value as an agency serving as a medium through which to provide medical care to indigent and medically indigent persons on a reimbursement rather than an insurance basis. The procedure is applicable to any community in New Jersey.

The Board of Governors wishes to express to The Medical Society of New Jersey their deep gratitude for and sincere appreciation of the continued moral and financial support so generously and graciously given to Medical Service Administration over the fourteen years of its existence.

State Board of Medical Examiners of New Jersey

PATRICK H. CORRIGAN, M.D., Secretary, Trenton

DURING the calendar year 1954, the Board examined 62 applicants for a license to practice medicine and surgery. Eight were graduates of osteopathic colleges. We examined 13 applicants for a license to practice chiropody, 180 for a license to practice chiropractic and 16 for licenses as bio-analytical laboratory directors. All candidates were citizens. The ratio who passed was:

Medicine and Surgery	85%
Chiropractors	73%
Chiropodists	100%
Laboratory directors	88%

Three hundred and twenty-nine licenses were issued to applicants who applied for endorsement of a license from another state, or a diploma from the National Board of Medical Examiners, and presented credentials to prove they could meet the requirements for examination that were in force in New Jersey at the time they were examined.

All credentials covering medical and hospital work submitted to the Board were verified.

One hundred and nine bio-analytical laboratory directors were licensed without examination and two by examination. Eighty-seven bio-analytical laboratories were registered.

The laws governing the practice of medicine and surgery, and osteopathy do not provide for an annual registration. The Board does not, therefore, know whether the number of licentiates now in practice is increasing or decreasing.

Annual registration would give the Board accurate information relative to the number of physicians practicing in New Jersey and would enable the licensed physicians to assist the Board in enforcing the law by reporting unlicensed physicians in their vicinity.

The laws governing the practice of chiropody, chiropractic and midwifery provide for an annual registration. Records show a decrease of four in the number of chiropodists, a decrease of seven midwives, and an increase of forty-five chiropractors. For the current year, 400 chiropractors registered. Thirty-five retired.

Following is a brief report of the Board's activities in enforcing the laws which they administer:

A. COURT CASES

Convicted, pleaded guilty or settled	17
Pending in the courts	13
Cases Dismissed	3
	33

B. HEARINGS BEFORE BOARD

Medical licenses suspended	1
Medical licenses revoked	2
Medical complaint dismissed	1
Medical petition for restoration pending	1
Medical petition for restoration denied	1
Midwifery licenses revoked	1
Midwifery licenses restored	1
	8

C. TYPE OF CASES INVESTIGATED	No. INVESTIGATED
Pharmacists practicing medicine	17
Prescribing herbs & drugs	5
Unlicensed medical doctors	3
Practicing chiropody without license	50
Unlicensed osteopaths	2
Naturopaths	2
Physiotherapists	5
Electro-therapists	3
Unlicensed psychiatrists	2
Practicing after failure to register	3
Medical suspension	1
Medical revocations	2
Midwifery revocations	1
	96

D. ANALYSIS OF INSPECTIONS AND INVESTIGATIONS

Investigations and inspections made	96
Visits made and treatments received in making the investigations	275

Atlantic

MATTHEW MOLITCH, M.D., President, Atlantic City

THE aims of this administration were the continued improvement of public relations, started in the previous year, and the stimulation of increased attendance at the monthly meetings. The year started with a Harvest Moon Dinner-Dance under the chairmanship of Dr. Anthony Merendino and Mrs. Richard Bew of the Auxiliary. The guests at the affair were Dr. and Mrs. Elton W. Lance. A *Bulletin* Award Medal was presented by the Editor, Dr. Samuel Diskan, to Senator Frank S. Farley for his cooperation with the medical profession. The Auxiliary entertained with dances and a "beauty contest."

Monthly meetings were moved from a Boardwalk hotel to the beautiful auditorium of the new Children's Seashore House. This was accomplished through the kindness of the President of the Board of Governors of the Seashore House, Dr. Elizabeth Raydin, and the Medical Director, Dr. Harvey Vandegrift. The Auxiliary cooperated by holding their meetings in the same building. Attendance increased notably because of this change

The September meeting heard Dr. Edward O. Harper, Professor of Psychiatry, Western Reserve University, who spoke on "Psychiatry and the General Practitioner."

The October meeting was addressed by Dr. Myer Naide, Assistant Professor of Medicine at the Women's Medical College, who spoke on "Peripheral Vascular Diseases."

The November meeting featured a pediatric panel. Speakers were Dr. Waldo Emerson, Professor of Pediatrics, Temple University, and Dr. Samuel Cressen from the same medical school.

At the December meeting Dr. William Likoff, of the Hahnemann Medical School spoke on indications for cardiac surgery.

Dr. Elton W. Lance, our State President, spoke at a combined meeting with the Auxiliary in January. This was one of our best attended meetings. Dr. David B. Allman also addressed the group. Entertainment was furnished by the Atlantic City Hospital Nurses' Choir, under the direction of Mrs. Victor Ruby.

The February meeting was addressed by Dr. David A. Cooper, Professor of Clinical Medicine at the University of Pennsylvania. His subject was, "Carcinoma of the Lungs."

The March meeting heard Dr. James R. Ritchey, Professor of Medicine, Indiana University School of Medicine. The Auxiliary arranged for a Musicale.

The April meeting was addressed by Dr. William W. Scott, Professor of Urology, Johns Hopkins University School of Medicine. "Office Urology" was his subject.

The May meeting featured a talk by Dr. Howard P. Rome, psychiatrist of the Mayo Clinic.

In 1954-5 attendance at meetings surpassed those of previous years. Thanks are due the officers and committee chairmen for their loyalty and support.

Outstanding jobs were done by Dr. Leonard Erber, Chairman of the Emergency Medical Service and Medical Practice Committees; Dr. Anthony G. Merendino, Chairman of the Entertainment and Censor Committees; Dr. Samuel Diskan, Editor of the Bulletin and General Chairman of the Public Relations and Publicity Committees; Dr. Charles Hyman, Chairman of the Judicial Committee; Dr. Baxter H. Timberlake, Chairman of the Legislative Committee; Dr. James A. Gleason, Chairman of the Insurance Committee; Dr. G. Ruffin Stamps, Chairman of the Welfare Committee; Dr. Charles A. Saseen, Chairman of the Telephone Squad; and by Dr. Milton Ackerman, Chairman of the Blood Procurement Committee.

During the year 8 new members were admitted to the Society and 1 member died. I believe that the aims of this administration as outlined in the first paragraph were largely fulfilled.

Burlington

Luis E. Viteri, M.D., President, Mount Holly

The activities of the Society have been confined to its regular monthly meetings, most of which have featured scientific programs. We have had a number of interesting and prominent speakers. The October session was a combined dinner meeting with the Burlington County Bar Association. The program that evening included a moot trial presented very realistically by the members of the Bar Association. On another occasion we were fortunate to have a visit by the President of our state medical society, Dr. Elton W. Lance, and the Executive Officer, Mr. Richard Nevin. They discussed the functions of the State Society. Perhaps the most outstanding event in this year's history in our County Medical Society has been the relatively rapid increase in membership. Burlington County is in the heart of the Delaware Valley development which has enjoyed a great increase in population and an increase in the number of young physicians settling in our county. We have welcomed six new members so far during this fiscal year and have had no resignations or deaths to date.

The policy of awarding one scholarship for nurse's training to a deserving high school graduate resident of Burlington County has been continued. Our Society supports the creation of a county-wide public health nursing association. This has been sponsored by public spirited citizens throughout the county with the approval of the Burlington County Board of Freeholders and the assistance of the New Jersey Department of Public Health.

One controversial matter came to the attention of the Society. This concerned the apportioning of surgical fees by Medical-Surgical Plan of New Jersey. It was the unanimous feeling of the Society that this would constitute fee-splitting and therefore they voted to reject such proposal.

The policy of close cooperation between our Society and the Burlington County Welfare Board has been continued to the benefit and satisfaction of all concerned. Fees for treating Welfare patients have been standardized and the method of collection of such fees no longer presents a problem.

Our fiscal year ends in May with traditional "Ladies Night," a joint meeting with our wives and members of the Woman's Auxiliary.

Cape May

Wayne H. Stewart, M.D., President, Cape May Court House

The Cape May County Medical Society met six times during 1954. Four of these meetings were held in Cape May Court House and two were held in Ocean City. At the January session, Dr. J. W. Ditzler, assistant professor of Anesthesiology at the University of Pennsylvania, spoke on the anesthetist and general practice.

At the March meeting Dr. Paul Pettit spoke on the treatment and diagnosis of concomitant and paralytic strabismus. At the May session, Dr. John Zinsser spoke on cardiovascular diseases in which surgery may be useful.

In September, Dr. William A. Jeffers discussed the medical and surgical treatment of hypertension. At this meeting tentative plans were made for sponsoring a radio program. This materialized in October when Dr. Wayne Stewart broadcast on the Medical-Dental School referendum.

On November 23, 1954, Dr. Orville Horwitz gave a comprehensive discussion on the diagnosis and treatment of various peripheral vascular diseases.

The next regular meeting was held January 25, 1955. Election of officers was held on that occasion. The new officers for the year being as follows:

President: Dr. William A. Doebele
Vice-President: Dr. Edward B. Tyson
Second Vice-President: Dr. Samuel Mazzotta
Treasurer: Dr. Harold F. Hughes

Dr. Herschel Pettit was re-elected nominating delegate to the State Society, and Dr. Millard Cryder was re-elected the alternate nominating delegate and Dr. Francis Hauck and Dr. Paul Pettit were elected alternate delegates.

During the year the Cape May County Medical Society donated funds to the Auxiliary in order to maintain in effect the Nurses' Scholarships Fund, a program which has been sponsored for the past three years.

Cumberland

Frank J. T. Aitken, M.D., President, Bridgeton

The Cumberland County Medical Society had a very successful year. Attendance of the Executive Committee has been perfect and the attendance of the membership has substantially improved.

There has been greatly widened participation by members. This has signalled an effort to recognize the changing pattern in the practice of medicine due to the increasing trend to specialization. This trend calls for stimulating programs that can maintain the interest of all doctors—young and old, family physicians and specialists, doctors who see medicine as a social science and those who see it as a natural science.

The cooperation of all the officers of the Society has been of the highest order. Particularly commendable were the services of the secretary, Dr. Mary Bacon, Dr. Nicholas Marchione, the program chairman and president-elect, and Dr. Samuel Pole, III, treasurer.

The Society has missed the stimulating contact formerly afforded by the visits of the gentlemen of other county societies. A joint meeting with the Gloucester County Society was held.

It is with pride that I have served this splendid group of doctors.

Essex

Frank S. Forte, M.D., President, Newark

So much more to be done and so little time to do it in, is undoubtedly the dilemma of the County President about this time of the year. And yet, in spite of the trials and tribulations inherent in the office, this year has been wonderful in accomplishments. This was possible because of the fine cooperation of a spirited Council, committee body and membership. Hence, as the Essex County Medical Society rounds out its 138th year, it is very comforting to say that we are bigger, better and more progressive than ever before.

The President's projected program has been filled more than satisfactorily.

Reception and Orientation of New Members

The first function of the new term was an innovation. On June 6, a reception was held in honor of our new members and their wives. The Officers, Councilors, and the organizational committee chairmen were also invited. Seventy doctors and their wives attended. The President spoke on the privileges and responsibilities of membership in organized medicine and then briefly outlined his program. The idea was so well received that it merits repetition.

Our monthly meetings have been phenomenal in attendance. There have been controversial problems to be sure, but each member has had the great American privilege of voicing his opinion in a democratic fashion. This has engendered renewed vigor in our Society. Our largest meeting was held on February 9 at the Essex House in Newark. This was for the AMA "Videclinic" which drew a record attendance of more than 1,100 doctors. All the county societies of the state had been invited, and doctors did come from all over the state. We are grateful to them for their cooperation.

Our next largest meeting was on March 10. The topic was Social Security vs. Private Pension Plans. Our 50 new members were invited to the special dinner in honor of the guest speaker. This departure from precedent we feel is within the spirit and framework of the orientation program for new members.

Other Activities

The *Judicial Committee* under the chairmanship of Dr. William H. Hahn, has quietly done an excellent job. The committee has ac-

quired a workable technic and, with very few exceptions, all problems brought before it have been amicably settled to the satisfaction of both doctor and patient.

Public Relations stands at an all time high. With many activities in our county touching on the very existence of our doctors, public relations is necessarily constantly in flux. The Judicial Committee has quietly contributed its potent share in quelling ruffled feelings that generally contribute to poor public relations.

Under the chairman of Dr. J. Harold MacArt, the *Hospital Relations* committee has met with representatives of all 22 hospitals in Essex County. Among the items considered were: Central Bone, Tissue and Eye Bank; presentation by Mr. Robert Kammerer, of how the Essex County Blood Bank's Credit System has worked in Essex County; and problems of the new Anesthesia Study Committee.

Dr. Gerald I. Cetrulo, Chairman of the *Civil Defense Committee* has done an outstanding job. His committee reviewed and approved the Newark Medical and Health Service Plan as outlined in a report distributed to Newark physicians.

The committee felt that the best interests of the profession at large would be served if the following policies were approved by the Council:

1. That each municipality through its *Director of Medical and Health Services* prepare a plan similar to the Newark plan outlining its facilities and installations: camps, hospitals, emergency hospitals, reporting centers, marshalling areas, and so forth.

2. That each Director of Medical and Health Services then send a copy of this to every doctor, nurse and hospital in his own area.

3. That each Municipal Director of Medical and Health Services send a copy to the Essex County Medical Society office for publication in a special number of the *Bulletin*.

4. That this special *Bulletin* be devoted to all these plans so that each doctor, hospital and control center would have a working knowledge of the mechanisms of the various plans in the county.

Dr. Henry H. Kessler of the *Rehabilitation Committee* reports "No formal committee meetings were held this year. The Third Annual Fred H. Allbee Lecture on Rehabilitation was presented at the Kessler Institute in December by Dr. Howard A. Rusk of New York. A clinic for amputee children combined with an educational program in this subject for parents and professional workers was held in May 1954. In April Dr. Martin Gumpert presented six lectures on "Problems of Aging."

Dr. Glass, Chairman of the *Membership Committee* reports that since last May we received 50 new members into our Society. Sixteen members of the Essex County Medical Society have passed away during this period.

Dr. S. William Kalb, Chairman of our *Speakers' Bureau* reports that the Speakers' Bureau has arranged 173 lectures for non-professional organizations. The services of 161 physicians were utilized for this. The audience has been estimated as numbering approximately 5,000.

Legislation and Publicity were two departments which have come along smoothly during the season. National Diabetes Drive was held in November and proved a great success. This promoted a great deal of good will through the efforts of Dr. John J. Torppey, Chairman. The results in good public relations surpassed expectation.

No report would be complete without the highest praise to the *Woman's Auxiliary* for their efficiency and excellent cooperation in any and all tasks assigned to them. They are, indeed, an asset to our Society. Our first monthly meeting of the year was a combined dinner meeting with the Woman's Auxiliary.

The Essex County Medical Society's *Bulletin* is constantly growing in its usefulness and coverage. Dr. Frank L. Rosen, Chairman and Editor, has been doing an exemplary job.

Under the chairmanship of Dr. G. L. D'Alessandro, the *Anesthesia Committee* of the Essex County Medical Society has embarked on a study program for the continued improvement of anesthesiologic care. This is the first effort in New Jersey in the study of anesthesia covering all phases of the subject, including anesthesia deaths, which were voluntarily requested.

A *Soft Bone Tissue and Eye Bank* has been established under the chairmanship of Dr. Alfred D'Agostini. As far as we know, it is one of the few, if not the only one of its kind in the country. A great deal of progress has been made by this committee. This Bank's usefulness goes without saying.

The Essex County *Blood Bank* has greatly increased its efficiency since establishing the Credit System on January 1, 1954. The Blood Bank has taken care of over 50 per cent of the County blood needs in 1954 and hopes to serve a larger ratio in the future. The Blood Bank is planning for a new home, which is vital for this great public relations vehicle.

Committee for Reduction of Meetings. A great deal of preparatory work has gone into

this. The basic idea is to have a central meeting place with the several hospitals meeting independently, perhaps at 5 p.m.,—one evening a month. There from 6 to 7:30 p.m., a collation and social hour would take place. From 7:30 to 9 p.m. the County Society meeting and a scientific program could be presented. Committee Chairman Dr. David Flicker is doing an excellent job coordinating material. We made contact with the AMA and the College of Surgeons for information about establishing a pilot study in Essex County for unifying groups who would receive credit for attending group meetings. At present there are about 250 medical meetings a month in Essex County alone.

A *Geriatrics Committee,* under the chairmanship of Dr. Alfred Hicks, has been established for studying and improving the care of the geriatric patient. This opens a new and important field for county society special interests.

For the past few years we have been thinking of suitable Society quarters in a more centrally located area. County-wise, our present headquarters are inadequate. To carry on our business in a fitting manner a correct location, sufficient space and parking facilities are a *must,* as soon as possible. Our *House Committee* is hard at work seeking a solution of this problem.

Gloucester

John J. Laurusonis, M.D., President, Gibbstown

The Gloucester County Medical Society has been active in supporting all programs set up by The Medical Society of New Jersey. Thus, we were wholeheartedly behind the proposed Medical-Dental School.

Early during the year, a committee was appointed to revise our Constitution and By-Laws. We are trying to fulfill the call of physicians for the Red Cross Blood Donor program of each locality; also liaison with the Gloucester County Tuberculosis Association and the Gloucester County Ambulance and Rescue Squad Association.

With the presentation and approval of our resolution at the State Medical Society in 1954, it has become possible for group membership in the Medical-Surgical Plan to be made available for smaller county societies.

Our Society has, thanks to the efforts of our *Program Committee,* under the able Chairmanship of Dr. Chester I. Ulmer, brought an excellent series of scientific programs. We have been honored to have such speakers and topics as: Anthony Sindoni, M.D., who spoke on "The Newer Concepts of Diabetes Mellitus;" H. Keith Fischer, M.D. on "Management of The Psychosomatic Patient;" William Likoff, M.D. on "The Evaluation of Cardiac Patients for Cardiac Surgery;" Ralph A. Jessar, M.D. on "The Rise and Fall of Anti-Arthritic Drugs."

The Social Session was held at the Woodbury Country Club on October 21, 1954, with the largest attendance in the history of the society. We were privileged to have with us Dr. Elton Lance, President of The Medical Society of New Jersey and his charming wife; Mr. Richard Nevin, State Society Executive Officer and his wife; Mr. Ivan Peterman, a renowned columnist, as our speaker of the evening, who gave us his views relative to world affairs. We do owe a debt of gratitude to our Committee on Arrangements, particularly to Dr. Chester I. Ulmer, whose efforts for the happiness of each one present were everywhere in evidence. A perfect evening was enjoyed by all.

I do wish to take the opportunity to thank all the chairmen and members of the committees, who have so earnestly worked hard on all projects and programs submitted to them, and express my appreciation to every member who participated in carrying out the work of the society this year.

Hudson

Edward G. Waters, M.D., President, Jersey City

Our monthly meetings, the focal point of the Society's existence, have been made as scientifically attractive as possible and all have been well attended. Numbered among guest speakers have been Dr. Mark M. Ravitch, Dr. Adrian Lambert, and Dr. Francis P. Twinem —of New York; Dr. William O. Wuester of Elizabeth, and Dr. Elmer Severinghaus of Nutley. Singled out for special mention is our January meeting, at which we were privileged to present the president of Seton Hall University, the Rt. Rev. Msgr. John L. McNulty, president of Seton Hall University, who spoke on the new Seton Hall College of Medicine and Dentistry. Members of the Hudson County Dental Society attended as our guests.

Working zealously throughout the year have been many standing and special committees. While space does not permit a detailed account of their projects, mention must be made of a few. The *Judicial Committee,* under the chairmanship of Dr. A. P. Rieman, has contributed much toward resolving several unusual and difficult matters. Headed by Dr. Philip Greenberg, the *Diabetes Committee* sponsored a highly successful Diabetes Detection Drive during November. The *Emergency and Night Calls Committee,* of which Dr. Vincent R. Campana is chairman, has kept a watchful eye during the year on the Society's Emergency and Night Calls Plan, revising it in minor details.

As part of the program of the *Committee for the Conservation of Sight and Hearing,* Dr. Alfred Magee gave instruction to school nurses on visual screening of school children. The *Workmen's Compensation Committee,* under the joint chairman of Dr. L. A. Pyle and Dr. Edward Alpert, has performed most creditable service. The *Advisory Committee to Selective Service,* under the leadership of Dr. Conrad M. Bahnson, functioned smoothly and efficiently throughout the year.

One committee singled out for special mention is the newly formed *Medical School Committee.* Appointed early last summer, it conducted meetings not only of its own, but it also met with local government officials and representatives of Seton Hall University, notably Monsignor McNulty, in the general interest of the medical profession of this county. Now that the Medical-Dental College has become a reality, we are happy to have established a most cordial and cooperative relationship with Seton Hall University.

The *Executive Committee,* held several special meetings throughout the year, in addition to its regular monthly meetings. Its members are to be commended upon the spirit in which they have given of their services to the Society and upon the general excellence of the work of this important committee.

At this time, we record with deep regret the death of seven members. To offset this loss, we have welcomed twelve new members to our ranks since the annual meeting of 1954.

The Society's single social event of the year took place on Lincoln's Birthday, when the members of the Society and their wives assembled at the Hotel Essex House in Newark for a dinner dance. This brilliant affair will be held annually in honor of the county society president.

Mercer

Joshua N. Zimskind, M.D., President, Trenton

Probably the public relations highlight for Mercer County medicine this year was the development of the third in the "Help Yourself to Health" radio series. Mrs. Nan Rednor, known to listeners of station WBUD as "Nan About Town" was very helpful. The program, using the facilities of WBUD, consisted of a panel on various phases of public health. Subjects included "Public Relations;" "Polio;" "Nephritis;" "Maternal Health;" "Arthritis;" "Diabetes and Nutrition;" "Heart Disease;" "Backache;" "Tuberculosis;" "Child Welfare;" "Cancer;" "Mental Health;" "Epilepsy;" "Problems of the Aged;" "Public

Health"; and "The Hospital, The Doctor and You." Each panel included Mrs. Nan Rednor plus a member of the Woman's Auxiliary to the Mercer County Component Medical Society, and three physicians. The public response was most gratifying.

SCIENTIFIC SESSIONS

THROUGH the efforts of Dr. F. K. Engelhart, Chairman, and the members of the Program Committee, Drs. J. L. Wikoff, John F. Kustrup, Lester J. Finkle, and John S. Wise, the following outstanding scientific sessions were presented:

Dr. Lowell Erf, Assistant Professor of Medicine, Jefferson Medical College: *Radio Isotopes.*

Dr. J. Robert Willson, Professor of Gynecology, Temple University School of Medicine: *Office Gynecology.*

Dr. Charles Bailey, Professor of Thoracic Surgery at Hahnemann Hospital: *Cardiac Surgery.*

Other sessions were devoted to the transaction of society business.

BLOOD BANK COMMITTEE

AT THE request of the Trenton Chapter of the American Red Cross, Dr. T. K. Rathmell, Chairman of our Blood Bank Committee, assisted by Drs. David A. Fluck, David Eckstein, Guy K. Dean, Andrew E. Ogden, and Erwin P. Sacks-Wilner, met with the Blood Bank Committee of the local Red Cross Chapter. Important points involving the relationship between the Red Cross and the hospital blood banks were discussed. The project will not be undertaken until such time as all common problems have been solved to the satisfaction of the participants.

ANNUAL ELECTION

ON NOVEMBER 10, 1954, the following were elected to office for the year 1955-1956, after a spirited meeting, with three candidates contesting for the position of Vice-President:

President ..... Dr. Albert F. Moriconi
Vice-President ... Dr. Jacob M. Schildkraut
Secretary-Reporter ... Dr. Samuel J. Lloyd
Treasurer ..... Dr. Warren E. Crane

MEDICAL-SURGICAL PLAN OF NEW JERSEY

A MEETING was held with Dr. Borsher and representatives from Mercer, Camden, Burlington and Middlesex County Medical Societies. There was discussion about possible changes in the division of surgical fees under the Medical-Surgical Plan of New Jersey.

Dr. L. Samuel Sica, of Mercer County served as chairman of the meeting. He pointed out that disapproval of the suggested procedure had been voiced at meetings in many of the counties. Since ethical questions were involved, it was probably not within the province of any health insurance company to implicate itself in such problems. It was felt a matter of this sort should not properly have been given consideration at the May 1954 Annual Meeting of The Medical Society of New Jersey where the voting members would be activated by divergent motives toward a numerically small but important group whose method of practice could be seriously compromised with disastrous results. It was felt that the Medical-Surgical Plan should not be used to carry unwanted practices from one part of the state to another, but only to provide prepaid medical care for certain portion of the population falling within definite income levels.

OTHER ACTIVITIES

FEBRUARY 19, the Woman's Auxiliary held a "Charity Ball" at the Trenton Country Club, for the benefit of their Nurse Scholarship Fund. The affair was very well attended by physicians, their wives, and friends. The proceeds, applied to the Nurse Scholarship Fund aided materially in accomplishing the quota for the year.

Members of the Mercer County Pharmaceutical Association were the guests of the Mercer County Component Medical Society at our annual outing, held at the Trenton Country Club on June 17. All details were carried out most efficiently by the Entertainment Committee, under the chairmanship of Dr. Joseph R. Burns, assisted by Drs. Arthur Sacks-Wilner, Aaron J. Heisen, John F. Johnson, Joseph W. Laufenberg, and Norman W. Garwood.

Immediately following each meeting, buffet luncheons have been served by members of the Woman's Auxiliary. These luncheons are well attended, and afford an opportunity to members from the various hospitals to meet on a friendly plane. The efforts of the Woman's Auxiliary in serving refreshments at the con-

clusion of meetings have contributed largely to a marked increase in attendance.

Last year, Mercer Society's headquarters in Atlantic City, under the supervision of Dr. William C. Ivins, Chairman, and his committee, Dr. Albert F. Moriconi and Dr. Warren E. Crane, served as a meeting place for our delegates and their friends, as well as for visits by delegates from other counties. It was a focal point for the social life of the group during the Annual Meeting of The Medical Society of New Jersey. Mercer will, in 1955, have a room, under the chairmanship of Dr. Ivins, who will be assisted by Drs. Moriconi, Crane, Wikoff, and McCormack.

Under the chairmanship of Dr. Joseph R. Burns, the Mercer County Medical Society's annual banquet was held at the Trenton Country Club, on November 18. Scrolls, in recognition of outstanding service rendered the public and the medical profession by press and radio, were awarded the *Trenton Times, Trentonian,* Radio Station WBUD, and Mrs. Nan Rednor, with the approval of the society, as a whole.

The speaker of the evening was Monsignor John L. McNulty, President, Seton Hall University, who spoke about "New Jersey's First Medical-Dental College."

Attendance records at all meetings have been maintained, which show an average for the year 1954 of 91 members at each meeting.

MEMBERSHIP

TWENTY members have been taken into the society during the last year; 8 are serving with the armed forces; 6 have resigned because of change in place of practice and residence; 10 are pursuing graduate courses and residencies; and three have passed away, namely, Dr. Earl S. Taylor, deceased May 24, 1954; Dr. Charles H. Mitchell, deceased June 10, 1954; and Dr. Alton S. Fell, deceased September 21, 1954. Drs. Mitchell and Fell were emeritus members.

Middlesex

MALCOLM M. DUNHAM, M.D., President, Woodbridge

HERE is the report of the Middlesex County Society for 1954:

January Meeting: "Nutrition in the Aging," Henry F. Page, Jr., M.D., Associate Physician, Chestnut Hill Hospital.

February Meeting: "Pain as a Gynecologic Symptom," A. Herbert Marbach, M.D., Senior Attending Gynecologist, Albert Einstein Medical Center.

March Meeting: "The Maxillo-facial Triad and Its Correction," Irving B. Soldman, M.D., Otolaryngologist to the Beekman Downtown Hospital, New York City.

April Meeting: "Dermatologic Manifestations of Internal Diseases," Robert F. Dickey, M.D., Senior Attendant Dermatologist, George F. Geisinger Memorial Hospital.

May Meeting: "Intestinal Obstruction in Infants," Charles H. Evans, M.D., Diplomate, American Board of Surgery.

June Meeting: Annual Doctors-Dentists outing. Speaker: Dr. Murray Banks, New York City.

October Meeting: "Alcoholism," C. Nelson Davis, Philadelphia, Pa., Director, Malvern Hospital Institute, Paul C. Fagan, M.D., Assistant in Medicine, St. Michael's Hospital, Newark, and Thomas H. Hogshead, M.D., Examining Physician, E. I. Du Pont's, Wilmington, Del.

November Meeting: "Office Proctology," Max P. Cowlett, M.D., Assistant Clinical Professor, N. Y. U. Medical School.

Monmouth

Howard C. Pieper, M.D., President, Keyport

Two events highlighted the year. They were the giving of the Salk Vaccine and the Medical-Dental School campaign.

The Salk Vaccine was given to 2856 children and follow-up blood specimens were taken from 200. Eighty-five of our members participated on a volunteer basis in this program supervised by Dr. George J. McDonnell who deserves much praise for his patience and efforts in scheduling the work.

Monmouth County Medical Society carried on an intensive and enthusiastic campaign in the Medical-Dental School referendum. Our Public Relations Chairman, Dr. Louis F. Albright, did a magnificent job. Our county compiled the largest plurality favoring the School of any county in the state.

Meetings of the Society have been held monthly with scientific presentations, arranged by our Program Chairman, Dr. Peter J. Guthorn. Emphasis has been on topics of interest to the general practitioner. Our September meeting was a panel presentation, "The Doctor and the Law." The Bar Association were our guests, and it was a very satisfactory meeting which provoked a lengthy discussion. Our March meeting was a joint dinner with the Dental and Pharmaceutical Societies. This was the fifth of such meetings, and they have all been a real help in improving inter-professional relations.

Membership increased from 256 to 273 since last year. One member died during the year. We had 4 members return from the military and still have 5 in service, most of whom are due out in the next few months.

The Annual Summer and Winter Dinner Dances were held and each in turn established a record turn-out. Our annual outing was held in June, with Dr. Joseph Bossone the winner of the golf tournament for the fifth time. Members were the guests of Lederle Pharmaceutical Company at Pearl River, New York. Forty-five of us spent a very pleasant day visiting the plant, and then had a round of golf on their sporty course, followed by a good steak dinner.

Our Speakers Committee, headed by Dr. William G. Herrman, provided speakers for numerous meetings, and have given lectures to adult groups on timely topics. These we consider excellent public relations.

Emergency Medical Service is functioning well on a volunteer basis. We hope the system will continue to meet the needs.

One of the goals set for this year was the establishment of a practical, comprehensive plan for Disaster and Civil Defense. Dr. Harold A. Kazmann accepted the Chairmanship of this committee, and he has done an admirable job on this dismal, difficult and almost impossible assignment, although the work is not yet completed.

Many of our other committees and individuals have made noteworthy contributions.

Passaic

Leopold E. Thron, M.D., President, Paterson

In the past year the Passaic County Medical Society has continued to take an increasingly active part in community affairs. The broad programs in the field of Public Relations, established in the past few years, have been maintained and strengthened. Perhaps our most fruitful effort is the Annual Press Dinner. Here the Welfare Council and Public Relations members meet informally with the editors of the major newspapers of our county. Each such gathering has done much to establish greater understanding between the press and medicine. We have for the second successive year jointly sponsored the Medical Forum with *The Herald-News* of Passaic. These forums have been immensely successful and have served to bring the doctor closer to the public.

An effort was also made to improve the physicians' telephone answering services in the area. The original thought was that a County Society operated exchange, for members only, would enhance public relations through more

understanding operators trained to answer physicians' calls, and through better coverage for each individual doctor. Study indicated that the Society was not yet ready to accept this responsibility and consequently other methods are being sought to assist the available commercial services in meeting the highest possible standards.

The Passaic County Medical Society made a vigorous and intensive campaign for the proposed Medical-Dental School. In this respect the local press was most cooperative, giving liberally both comment and news space, and presenting all sides of the question. The Welfare Council voted the expenditure of several hundred dollars for paid newspaper advertisements. The Passaic County Medical Society is officially on record as approving, and actively supporting, a State Medical-Dental School.

Our close relationship with the Legislature is being continued in our Annual Dinner with the Passaic County Senator and Assemblymen. This Society initiated this practice two years ago and notes with pride that The Medical Society of New Jersey now recommends such liaison to all its component societies.

The Program and Post-Graduate Education Committee has provided us with speakers of the highest quality on a variety of timely subjects. The Graduate Education Program for this year was a comprehensive series of lectures on "Trauma" given by leaders in traumatic surgery.

Subcommittees to the Public Health Committee have been continuously active in their fields. Among these, the work of the Committees on Cardio-Vascular Disease, Diabetes and Nutrition, and Maternal Welfare may be particulary commended. The subcommittees to the Medical Practice Committee have also been active, particularly the committees on Anesthesia, Hospital Relationships and Industrial Health.

The Civil Medical Defense Committee has maintained continuous liaison with the area Civil Defense and is alerted to the latest changes that come about.

The Audit for the year revealed the Society to be on a sound basis in all phases of its activity. We are proud to be the only county society in the State which owns and operates its own building.

The *Bulletin* continues to be a reliable and permanent source of information, not only to the members of the Society but to many related organizations throughout the county. Its value is indicated by the frequent complimentary comments by its readers which now number approximately one thousand.

No report would be complete without an expression of appeciation to our Woman's Auxiliary. This year they have been unusually active. They served refreshments at our meetings. They gave a dance for our entertainment. They carried out a vigorous campaign for the Medical-Dental School. They initiated the Homemaker Service which proved to be a useful and needed aid to our patients.

I express personal thanks to my fellow officers for their unstinting support and helpful suggestions throughout the year. To Miss Cornelia Horn and Mr. H. Randall Norris I owe a debt of gratitude for their infinite patience and often tireless work in our office.

Union

Edward G. Bourns, M.D., President, Elizabeth

It has always seemed to me that writing an annual report before the year is finished smacks somewhat of a shotgun wedding. However, Union County has weathered another year, and nobody drew any pistols. The year's events unfolded smoothly beginning with a salubrious outing at the Richmond County Country Club. This year was most distinguished for our County as Dr. Elton W. Lance, the State Society President is a resident of Rahway in Union County.

The biggest piece of progress within the County was the revision of our Constitution under the chairmanship of Dr. Lorrimer B. Armstrong. This tedious job was finished in time for the new president, Dr. Carl G. Hanson of Cranford. Dr. Armstrong and his committee deserve the profound thanks of the entire Society for this excellent work. The Workman's Compensation Committee, Dr. Joseph A. Lepree, chairman; The Emergency Medical Service Committee, Dr. Henry J. Konzelman, chairman, the Judicial Committee, Dr. T. J. Walsh, chairman, the Program

Committee, Dr. Charles W. Boozan, chairman, and all other committees under able chairmen functioned very well.

We were saddened by the death of our colleagues, Walter F. Phelan, John J. Sheedy, Joseph E. L. Imbleau, Henry P. Dengler, George Friedberg. The gaps they leave, for friends, patients, hospitals and communities are slow to be filled. To their families the Union County Medical Society again extends its deepest sympathy.

The Woman's Auxiliary has been staunchly and graciously by our side throughout the year. I am sure many members are far behind in realizing what a wonderful job their girls do for us and medicine in general. To them our special thanks.

The real work in our organization is produced of course in the Society offices by Miss Louise Rogers. Here the solid grist of medical administrative labor is ground to an efficient dish and served up to the members. True, some have a slight anorexia for medical affairs but, as we now number 555 members, what harmony we achieve is all the more remarkable. A salute and our grateful thanks to Miss Rogers and her staff.

My final thanks is to the Executive Committee whose faithful backing has made this year's work a pleasure. I hope the coming year will bring a broader participation in county affairs from the Plainfield and Summit ends of the county. The medical lights there tend to stay too much under the bushel—county wise. We need all the county in active participation. To next year's officers, our best wishes and continued cooperation.

TUBERCULOSIS *Abstracts*

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Vol. XXVIII April, 1955 No. 4

The Treatment of Tuberculous Lymphadenitis

A Report by the Comm. on Therapy, American Trudeau Society, The American Review of Tuberculosis, November, 1954.

The treatment of tuberculous lymphadenitis has received little study since the introduction of specific antimicrobial therapy, as compared with the treatment of pulmonary tuberculosis and of other forms of extrapulmonary tuberculosis. This comparative neglect probably results from the relative infrequence of tuberculosis of the lymph nodes as a presenting manifestation of tuberculosis; and from the widespread impression that when it does so present itself, especially as an apparently localized infection of superficial nodes, it is less serious than most other forms of tuberculosis in the human.

As a consequence, the recent literature concerning the treatment of tuberculous lymphadenitis is sparse, especially with regard to the results of antimicrobial therapy. Not only is there no consensus regarding the optimum treatment, but there is scarcely any formulated opinion except that of surgeons and radiologists, who are concerned primarily with the local aspects of treatment by excision or by roentgen irradiation. A recent analysis, however, of all the patients with tuberculosis of the superficial lymph nodes discharged from the Toronto Hospital for Tuberculosis in the twenty-year period 1932 - 1952 indicates that this is uncommonly a localized form of tuberculosis and no longer predominantly a disease of childhood, which it was earlier, when the excisional treatment of cervical lymph node tuberculosis was perfected. The principle of the complete removal of all involved nodes and cold abscesses has been followed by more recent advocates of the surgical excision of superficial lymph node tuberculosis.

There appears to be no doubt that tuberculosis of the superficial lymph nodes can be effectively treated by excision so far as the local result is concerned. There is also evidence that roentgen irradiation is often locally effective and that, with the lower dosages recently employed, the hazards are not great. Reports of late follow-up results of these forms of treatment are limited, and there is little recognition of the possibility that superficial lymph node tuberculosis has become more commonly a manifestation of generalized tuberculosis than it was earlier. Yet in the Toronto Hospital series 88 per cent of the patients had associated tuberculosis elsewhere in the body, most commonly in the lungs and in the bones and joints.

Both the surgical and the irradiation treatments are concerned principally with cervical lymph node tuberculosis and are predicated on the conception that tuberculosis of these lymph nodes is usually a localized form of tuberculosis, of which the portal of entry is the oro-pharynx. Tuberculosis of the tonsils, either from primary or reinfection, is held in this view to be commonly associated with or, indeed, responsible for the cervical lymph node tuberculosis. Pathologic evidence that this is now frequently the case is lacking. On the contrary, there is much to suggest

that cervical, no less than axillary, intrathoracic, or abdominal lymph node tuberculosis is most often a manifestation of generalized tuberculous infection.

Regardless of whether or not cervical lymph node tuberculosis is often associated with tuberculosis of the tonsil, there is little reason to think that it is frequently caused by infection with tubercle bacilli of bovine origin. Even in 1910 careful studies by Park and Krumwiede showed that infection with tubercle bacilli of human origin predominated except in the age group of less than five years.

The available literature concerning the effect of antimicrobial therapy indicates merely: (1) that tuberculous lymphadenitis does tend to regress under such therapy, although often very slowly; and (2) that short-term, (up to 120 days) therapy is followed frequently by local relapse or the development of active foci elsewhere. The published reports relate almost exclusively to streptomycin or streptomycin-PAS. Very few reports are available regarding long-term therapy, and even fewer regarding isoniazid therapy in this form of tuberculosis.

In view of the paucity of information regarding presently available forms of antimicrobial therapy, the Committee attempted to collect the experience of its own members and of others. The practice and experience of individual hospitals in the Veterans Administration were polled by the Committee thus adding greatly to the volume of clinical material which could be considered.

The variability in treatment was so great that no statistical analysis of results could be attempted. The practice varied from the one extreme of surgical excision or roentgen irradiation with no concomitant antimicrobial therapy to the other extreme of long-term antimicrobial or simple rest treatment with no local treatment, except in exceptional circumstances. Those hospitals which employed long-term chemotherapy were satisfied with the effect on the lymph nodes themselves and usually reported a favorable result during the maintenance of therapy. No significant data on the incidence of post-treatment relapse were accumulated. The longer that excision of superficial lymph nodes was deferred, the less frequently was it considered necessary. Sinuses usually healed, and cold abscesses regressed, although frequently with the aid of needle aspiration. No comparisons were possible between isoniazid and streptomycin-PAS since, when isoniazid was used, it was usually in combination with other drugs. One observation of special interest is that even lymph nodes which break down or first appear during antimicrobial therapy usually regress satisfactorily if the therapy is continued unchanged. This has been noted both under combined therapy and under isoniazid as single-drug therapy.

The consensus of the Committee, based on the literature and the unpublished experience which was reviewed, is that antimicrobial therapy is indicated in virtually all instances of active tuberculous lymphadenitis, as in other clinical forms of tuberculosis. The evidence indicates, however, that short-term therapy is not adequate and that long-term therapy is not yet established as independently capable of permanently arresting the disease in most instances. The extent to which excisional surgery, roentgen irradiation, and prolonged rest therapy are needed is as yet entirely undetermined. There is much to suggest that the management of lymph node tuberculosis simply as a local disease process without systemic treatment is rarely, if ever, justified at the present time. The importance of rest and sanatorium treatment should not be discounted, especially in early cases.

Obviously, there is need for more information, particularly of statistically significant numbers of patients treated in various fashions and followed for a considerable number of years. This form of tuberculosis is sufficiently important that its special problems merit particular study, and sufficiently prevalent that such study is practicable. *Prepared for the Committee on Therapy,* American Trudeau Society, by Carl Muschenheim, M.D., New York Hospital-Cornell Medical Center.

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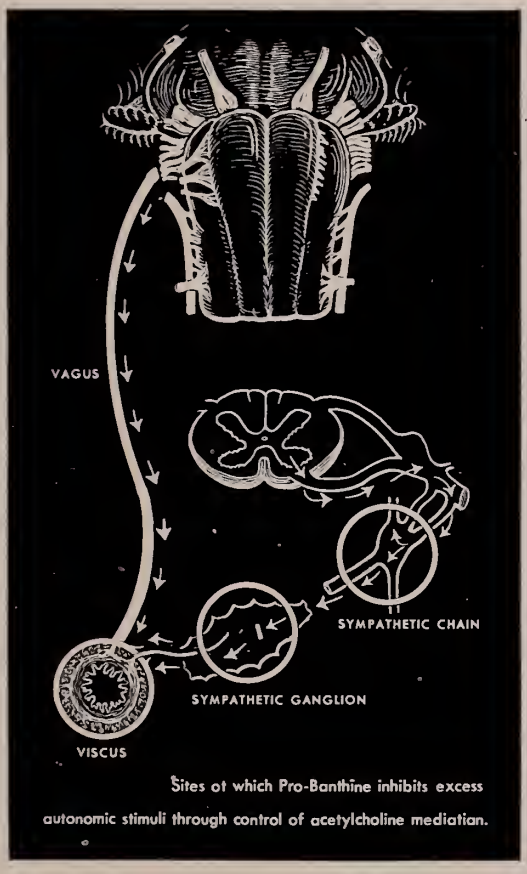

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1. Schwartz I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: Gastroenterology *25*:416 (Nov.) 1953.

2. Roback, R. A., and Beal, J. M.: Gastroenterology *25*:24 (Sept.) 1953.

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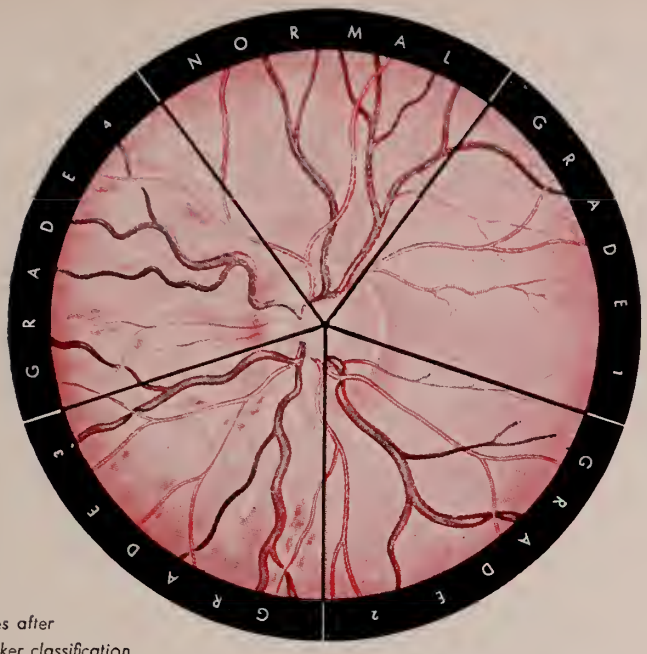

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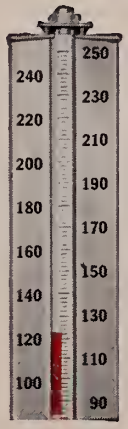

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REFERENCES: 1. Kroop, I. G., *N. Y. State J. Med.* **54**:2699, Oct. 1, 1954. 2. Heffer, E. T. *et al.*, *J. Pediatrics* **44**:630, June 1954. 3. Massell, B. F., *New England J. Med.* **251**:263, Aug. 12, 1954.

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*Pratt, R., & Dufrenoy, J.: Texas Rep. Biol. & Med. *12*:145, 1954.

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(1) Butler, A. M., and Wolman, I. J.: Quart. Rev. Pediat. 9: 63, 1954. (2) Moore, I. H.: Journal-Lancet 74: 80, 1954. (3) Collins-Williams, C.: J. Pediat. 45: 337, 1954. (4) Clein, N. W.: Ann. Allergy 9: 195, 1951.

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According to the investigators, the "vascular lesions were in the ascending aorta but extended from the valves of the left ventricle to the proximal portions of the carotid and femoral arteries . . . The aortic lesions were chiefly characterized by the presence of lipid-laden phagocytes and increase in collagen and elastic fibers. The lipids were in part cholesterol derivatives."

Cholesterol, an essential metabolite produced in intermediary metabolism,[2] is biosynthesized from dietary protein, fat, and carbohydrate.[3] Normally, its synthesis is exquisitely controlled to insure adequacy as well as to protect against an oversupply.[4] Furthermore, considerable evidence indicates that an increased cholesterol intake is not an etiologic factor in alleged aberrations of cholesterol metabolism such as atherosclerosis.

In widely variable amounts, cholesterol occurs in foods of animal origin—meat, poultry, fish and marine foods, eggs, milk products—all foods of great nutritive value.[3] Present knowledge in no way warrants alteration in the customary consumption of these foods because of their contained cholesterol.

Skeletal muscle of beef, lamb, pork, and veal provides but small amounts of cholesterol, approximately 0.06 Gm. per 100 Gm. moist weight of meat.[5] Since atherosclerosis may interfere sharply with normal nutrition, the patient should consume diets rich in protein foods (such as meat), vitamins, and fruit.[6] In addition to high quality protein, meat supplies valuable amounts of needed B vitamins and essential minerals.

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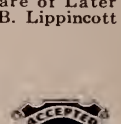
The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.



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Accommodations for chronic cases including arteriosclerotic and senile.

Outpatient therapy and consultations by appointment.

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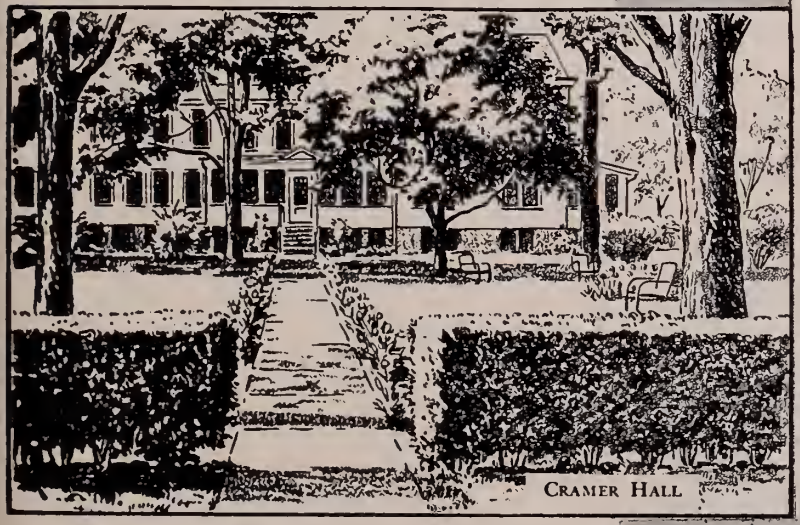
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THE GREATEST ACHIEVEMENT IN ZENITH'S CRUSADE TO LOWER THE COST OF HEARING

ZENITH'S FINEST QUALITY
IN THE TINY, NEW
3-TRANSISTOR
"75-X" HEARING AID
FOR ONLY $75.00

The discovery of transistors to replace conventional vacuum tubes opened a bright new horizon of help for those who are hard-of-hearing. But price—and price alone—has kept many from enjoying the greater hearing-aid clarity, compactness, convenience and low operating cost offered by this modern "electronic miracle."

Now—in the completely tubeless, 3-transistor Zenith "75-X", all these advantages can be obtained for only $75.00! The importance of the "75-X" to America's hard-of-hearing is instantly evident when you compare its low price to the $250 to $300 being charged for some competitive 3-transistor hearing aids.

The new "75-X" hearing-aid *is built to the same exacting standards as all Zeniths!* Tiny, ultra-compact, the "75-X" offers an abundant measure of power and performance! Fingertip tone and volume controls. *72 different response modifications* to suit individual hearing requirements. And, the "75-X" operates for 10¢ a week on *one* small 10¢ dry battery, available everywhere.

ZENITH®
HEARING AIDS
By the Makers of World-Famous Zenith TV and Radio Sets

10-DAY MONEY-BACK GUARANTEE

Your hard-of-hearing patients can try a Zenith aid at home, work, church, theater, anywhere... and if they are not completely satisfied, they need only return the instrument within 10 days and their money will be refunded. Zenith purchasers also have the protection of Zenith's One-Year Warranty and Five-Year Service Plan. Easy time-payments, too, if desired.

A COMPLETE LINE OF HEARING AIDS

There are four other great models in Zenith's complete line of superb hearing aids, providing help for borderline to the most severe cases of correctable impairment. Each is built to Zenith's unvarying standards of quality—each offers special advantages—and each is moderately priced and economical to operate in line with Zenith's continuing crusade to help more people hear better at far lower cost.

You can refer your hard-of-hearing patients with confidence to any of the franchised Zenith Hearing Aid dealers listed on the opposite page:

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ASBURY PARK
Anspach Bros., 601 Grand Avenue

ATLANTIC CITY
Bayless Pharmacy, 2000 Atlantic Avenue

AVON
Conover's Hearing Aid Center, 319 Main Street

BAYONNE
Bayonne Surgical Co., 547 Broadway

BELLEVILLE
William C. Smith, Opt., 334 Washington Ave.

BERGENFIELD
Myerson's Pharmacy, 36 N. Washington Ave.

BOUND BROOK
Peter's Jewelers, 401 E. Main Street

BRIDGETON
J. L. Bear Co., Opticians, 48 N. Pearl Street

CAMDEN
Bernkof-Kutner Optical Co., 213 No. Broadway

CARTERET
Gruhln's Pharmacy, 78 Roosevelt Avenue

CLIFFSIDE PARK
Cliffside Hearing Center, 659 Anderson Avenue

DOVER
Dover Jewelers, Inc., 19 E. Blackwell Street

EAST ORANGE
Anspach Bros., 533 Main Street

ENGLEWOOD
F. G. Hoffritz, 30 Park Place

FAIR LAWN
Plaza Jewelers, 111 Plaza Road

FREEHOLD
Freehold Hearing Aid Ctr., 16 W. Main Street

GLOUCESTER CITY
Gannon's Inc., 4th & Market Streets

HACKENSACK
Petzold Opticians, 315 Main Street

JERSEY CITY
Honiberg Drug & Surgical Supply, 618 Newark Ave.
Rudolph's Bros., Inc., 40 Journal Square

KEYPORT
Keyport Jewelers and Opticians, 49 West Front St.

LAKEWOOD
Gottlieb's Pharmacy, 328 Clifton Avenue

LEONIA
Lessers' Drugs, 326 Broad Avenue

LONG BRANCH
Milford S. Pinsky, Optician, 220 Broadway

MADISON
Madison Pharmacy, 66 Main Street

MILLBURN
A. J. Kovacs, Optician, 357 Millburn Avenue

MORRISTOWN
John L. Brown, Optician, 57 South Street

NEWARK
Academy Hearing Center, 201 Washington Street
L. Bamberger & Co., Optical Dept., 131 Market Street
Harold Siegel, 665 Clinton Avenue

NEW BRUNSWICK
Tobin's Drug Store, 335 George Street

NEWTON
Hendershot's Drug Store, 161 Spring Street

ORANGE
B. Robinson, Optician, 343 Main Street

PATERSON
Gay-Way Optical & Hearing Aid Co., 449 Union Ave.
William Ross, Opt., 150 Broadway

PENNSAUKEN
Thor Drug Co., 4919 Westfield Ave.

PERTH AMBOY
P. Amboy Hearing Aid Centre, 512 Nat'l. Bk. Bldg.

PLAINFIELD
L. Bamberger & Co., Optical Dept., 249 E. Front St.
Frank N. Neher, Opt., 211 E. Fifth Street

PLEASANTVILLE
Joseph D. Reses, Drugs, 901 No. Main Street

RIDGEWOOD
R. B. Grignon, 17 N. Broad Street

RUTHERFORD
So. Bergen Hearing Center, 30 Orient Way

SALEM
Lummis Jewelers, 209 East Broadway

SOMERVILLE
Alan Moskowitz, Optician, 96 West Main Street

SUMMIT
Anspach Bros., 348 Springfield Avenue

TOMS RIVER
Di Wol Hearing Center, 50 Main Street

TRENTON
Frank Erni, 17 N. Montgomery Street

UNION CITY
North Jersey Hearing Center, 4311 Bergenline Ave.
Arthur Villavecchia & Son, 1206 Summit Avenue

VERONA
Suburban Pharmacy, 538 Bloomfield Avenue

WASHINGTON
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WEST NEW YORK
Walter H. Neubert, 450-60th Street

WOODBURY
Resnick's Pharmacy, Broad & Walnut Streets

how one
CHLOR-TRIMETON *REPETAB*
assures 8-12 hours' sustained relief in hay fever

Outer layer dissolves immediately providing rapid onset of relief

Special Timed Barrier (not enteric coating) releases inner layer for prolonged effect

Inner core still intact 2½ hours after ingestion of 6 special radiopaque REPETABS*

At 4½ hours disintegration of cores well underway—complete in four, beginning in two.*

*Unretouched x-rays.

*the **REPETAB** principle assures prolonged sustained relief with single dose convenience*

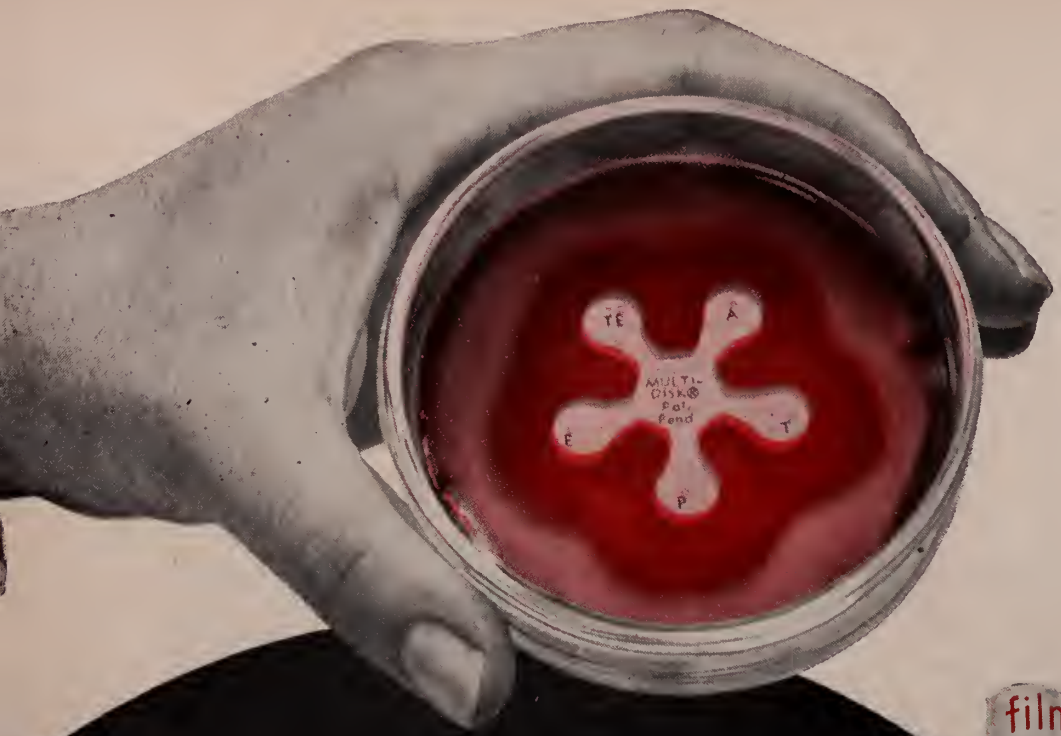
CHLOR-*TRIMETON*® Maleate, brand of chlorprophenpyridamine maleate.

REPETABS,® Repeat Action Tablets.

Schering

CHLOR-TRIMETON *REPETAB*

SCHERING



specific therapy against the cocci...

Now, you can prescribe an antibiotic (*Filmtab* ERYTHROCIN) that is specific therapy for most bacterial respiratory infections. Specific therapy—because these infections are caused by staph-, strep- or pneumococci. *And the cocci are the very organisms most sensitive to* ERYTHROCIN. In fact, you'll find ERYTHROCIN more active against this group of organisms than many other antibiotics.

filmtab

Erythrocin® STEARATE

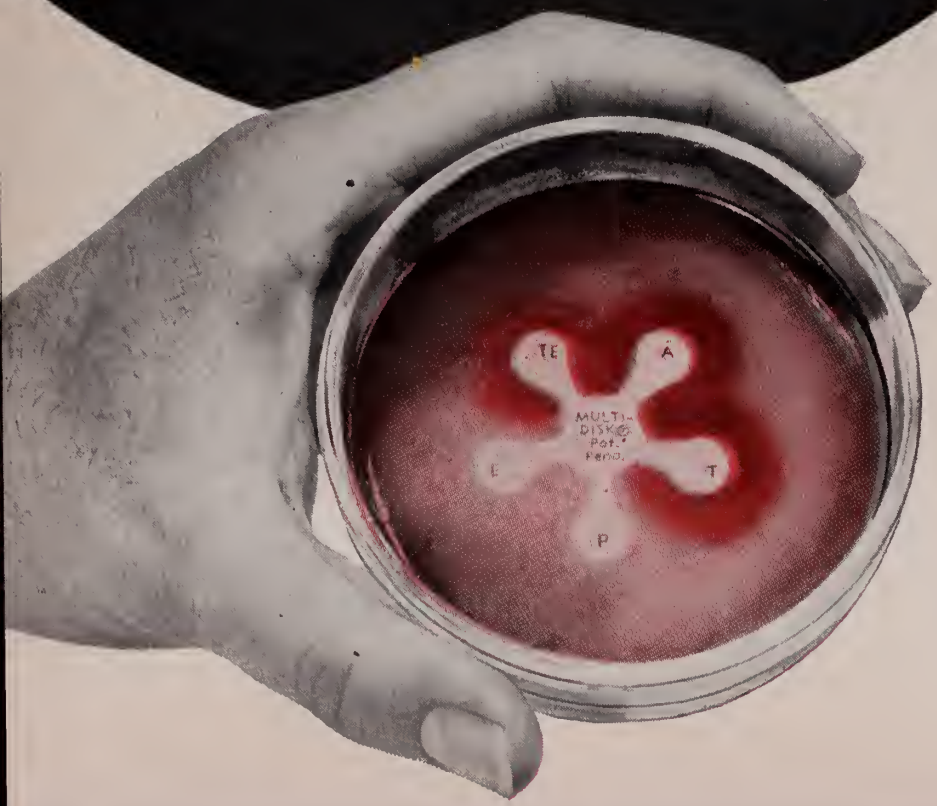
(ERYTHROMYCIN STEARATE, ABBOTT)

Against streptococci

This is an actual sensitivity test with a strain of *Streptococcus pyogenes* on a blood agar plate. Note the high activity of ERYTHROCIN against this organism. This same streptococcus may be associated with *sinusitis . . . otitis media . . . tonsillitis . . . pneumonia . . . empyema . . . pharyngitis . . . septicemia . . . tracheobronchitis . . . streptococcal sore throat . . . scarlet fever . . . erysipelas . . . certain urinary tract infections* . . . and *certain cases of subacute bacterial endocarditis* and *osteomyelitis*.

Against common intestinal flora

This sensitivity test shows ERYTHROCIN and the same antibiotics against a typical intestinal strain of *E. coli*. Note that ERYTHROCIN and penicillin do not affect growth of this organism—while the other antibiotics show marked inhibitory action. Since ERYTHROCIN is inactive against gram-negative organisms, *it is less likely to cause alteration in common intestinal flora—with an accompanying low incidence of side effects.*



...with little risk of serious side effects

The main reason is because ERYTHROCIN acts specifically. It destroys only harmful coccic invaders—yet doesn't materially change normal intestinal flora. *Thus, your patients rarely get side effects from* ERYTHROCIN. Nor do they get the allergic reactions sometimes seen with penicillin therapy. *Filmtab* ERYTHROCIN (100 and 200 mg.) comes in bottles of 25 and 100. Won't you prescribe *Filmtab* ERYTHROCIN—soon? Abbott

filmtab **Erythrocin®** STEARATE

(ERYTHROMYCIN STEARATE, ABBOTT)

Now Diaper Service for Hospitals

BABY SERVICE HAS CREATED AN OUTSTANDING HOSPITAL SERVICE DIVISION

Offering:

Now serving many of New Jersey's Leading Hospitals.

- **Daily pick-up and delivery.**
- **Same diapers returned.**
- **Diapers treated with residual antiseptic.**
- **Charge is only for diapers actually used.**
- **Featuring *new* DEXTER NO-FOLD diapers.**

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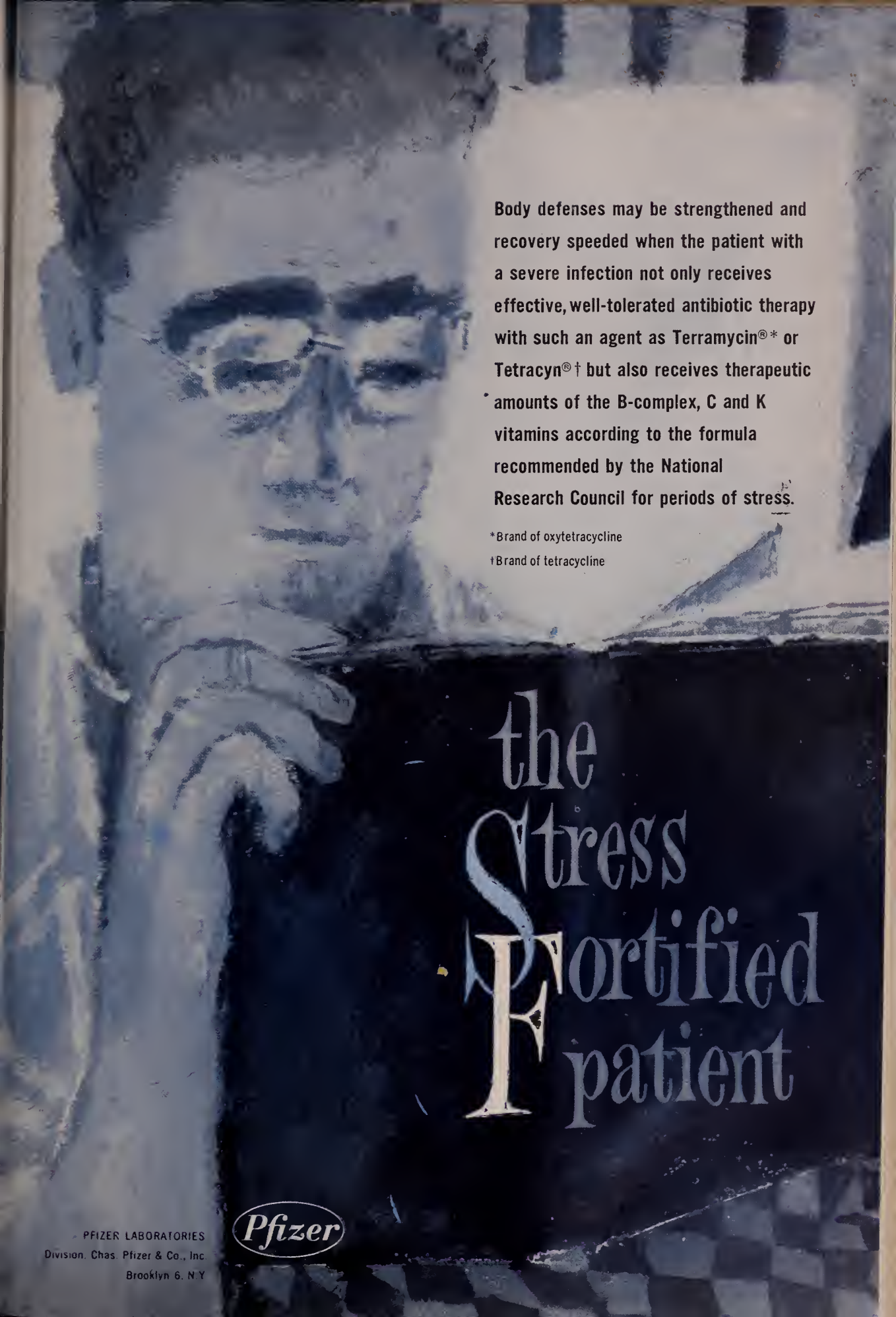
Also Individual Diaper Service for the Home

We gratefully acknowledge the advice and co-operation of many physicians in helping us to plan and supply a SUPERIOR SERVICE.

Washed Separately • Dried Separately • Packed Separately

- The container we furnish for used diapers sprinkles its soiled contents with an efficient antiseptic solution whenever the container lid is opened and closed.
- All plant operations are carefully supervised. A chemical check is continuously made, and bacteria colony counts of the diapers are run.
- A modern tested diaper supply service for our customer's exclusive use.

Safe! Individual! Dependable!



Body defenses may be strengthened and recovery speeded when the patient with a severe infection not only receives effective, well-tolerated antibiotic therapy with such an agent as Terramycin®* or Tetracyn®† but also receives therapeutic amounts of the B-complex, C and K vitamins according to the formula recommended by the National Research Council for periods of stress.

*Brand of oxytetracycline

†Brand of tetracycline

the Stress Fortified patient

Pfizer

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DOCTOR, here's a question and an answer you may find useful when patients ask about cigarettes:

What do Viceroys do for you that no other filter tip can do?

These filter traps, doctor, are composed of a pure white non-mineral cellulose acetate. They provide maximum filtering efficiency without affecting the flow of the smoke.

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King-Size Filter Tip **VICEROY**

WORLD'S MOST POPULAR FILTER TIP CIGARETTE

ONLY A PENNY OR TWO MORE THAN CIGARETTES WITHOUT FILTERS

Gantrisin / 'Roche' a single, soluble, wide-spectrum sulfonamide
tablets, pediatric suspension, syrup, ampuls, ophthalmic solution and ointment.

Pneumonia*

℞ Gantrisin tabs. 0.5 Gm

#60

S. 8 tabs. initially; then

4 tabs. q. 6 h., p.r.n.

Meningitis*

℞ Inject i.v. 10 cc (4 Gm)

Gantrisin Diethanolamine q. 8 h.;

then shift to oral medication

with 4 tabs. (2 Gm) q. 6 h.

Tonsillitis* in child weighing 40 lbs.

℞ Gantrisin (acetyl) Pediatric

Suspension ℥ iv

S. Initial dose 2 teasp.; then

1 teasp. q. 6 h.

Urinary infections*

℞ Gantrisin tabs. 0.5 Gm

#100

S. 8 tabs. initially; then 4

tabs. q. 6 h., p.r.n.

Cystitis* in child weighing 40 lbs.

℞ Gantrisin (acetyl) Syrup ℥ iv

S. Initial dose 2 teasp.; then

1 teasp. q. 6 h.

Blepharitis*

℞ Gantrisin Diethanolamine

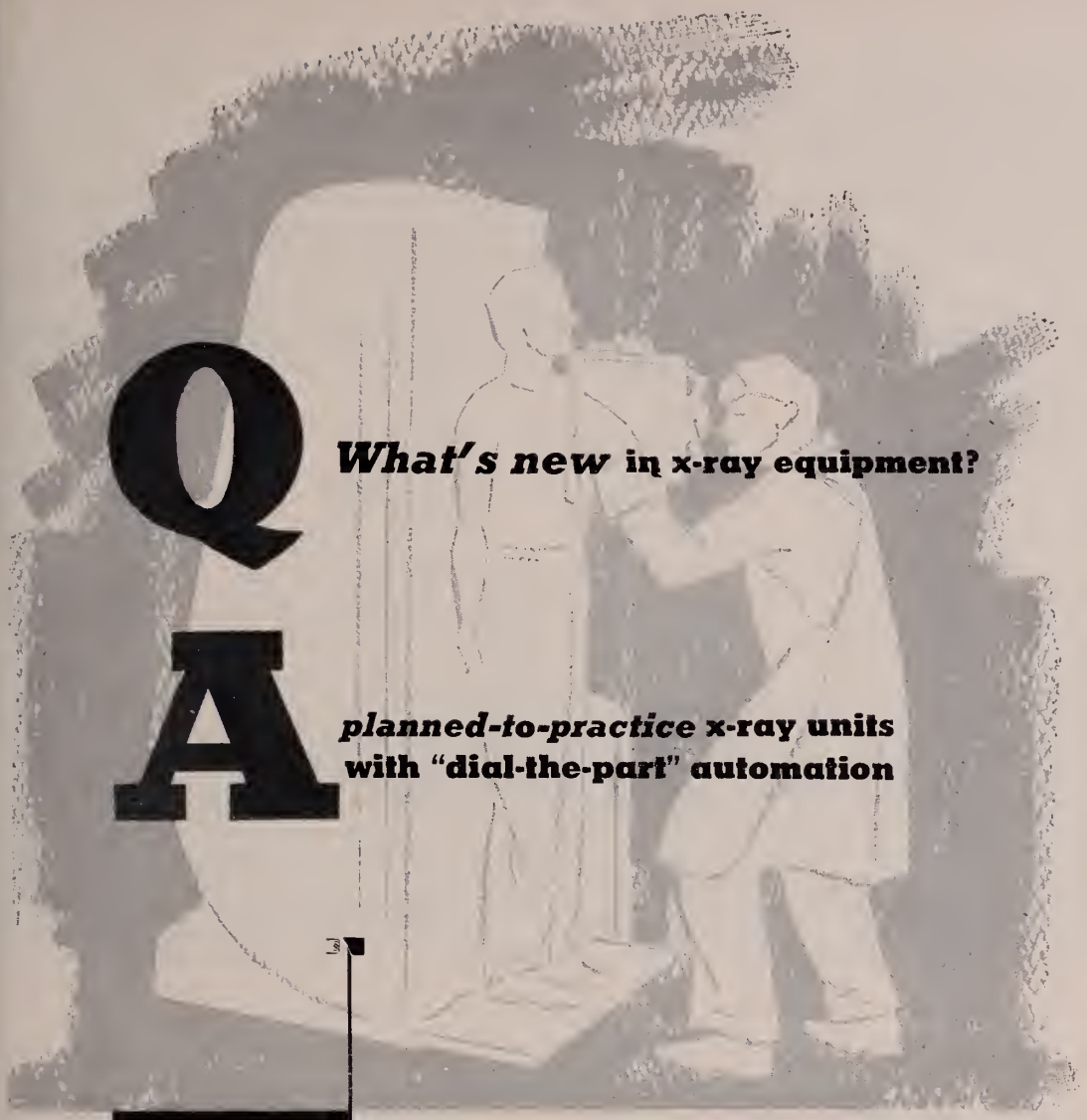
Ophthalmic Ointment 4%, 1/8 oz

S. Use in eye 3 times

a day and at bedtime.

* ... when due to streptococci, staphylococci, meningococci, H. influenzae, K. pneumoniae, E. coli, B. proteus, B. pyocyaneus (Pseudomonas aeruginosa), A. aerogenes, paracolon or alcaligenes fecalis. As is true of all antibacterial agents, there may be failures due to resistant strains.

Gantrisin® - brand of sulfisoxazole (3,4-dimethyl-5-sulfanilamido-isoxazole)



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name? **new Anatomatic "Century II"**
price? **well within reach of the modest budget**
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Send me information about "Anatomatic" Century II

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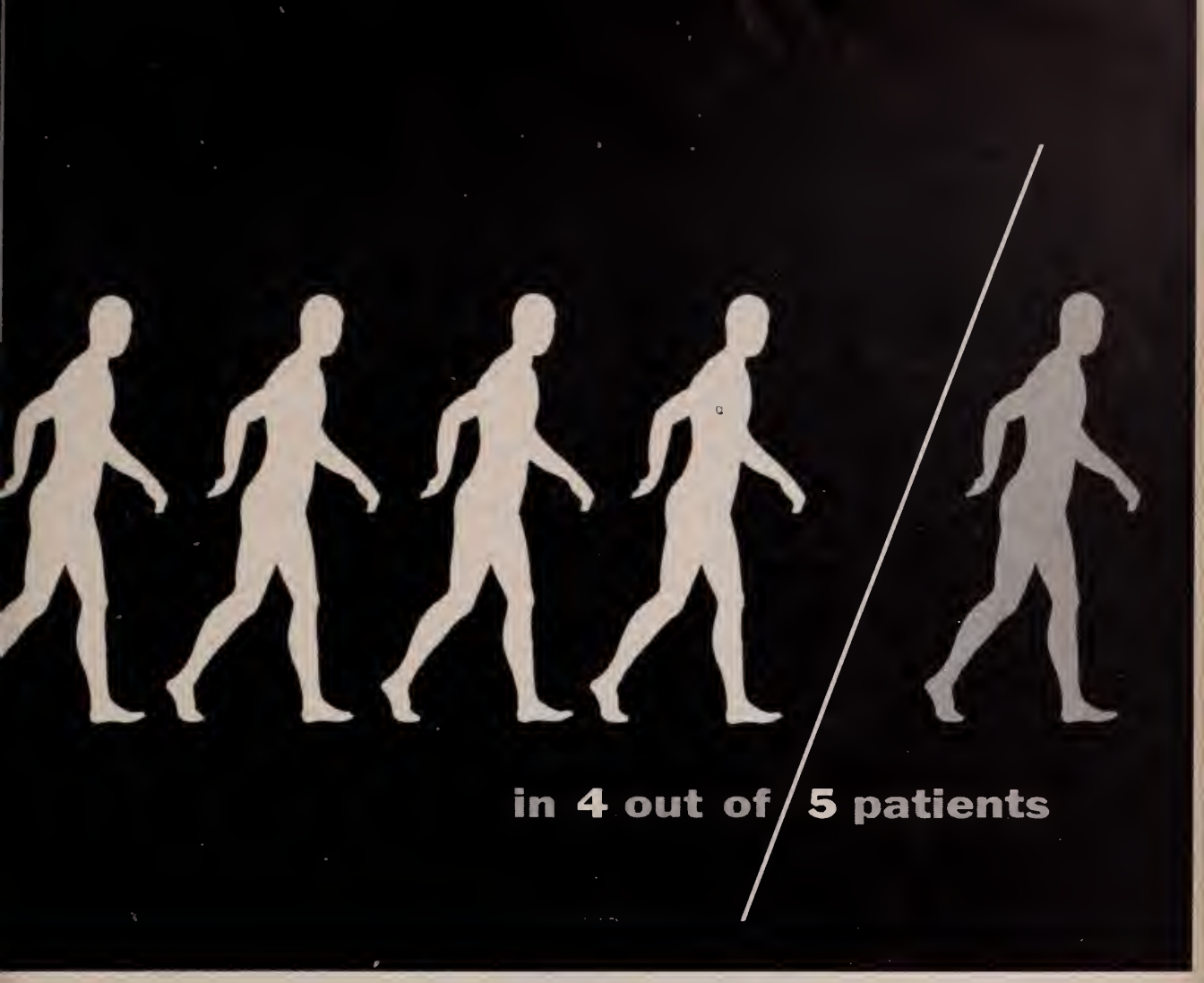

you can prevent attacks of angina pectoris

Peritrate, a long-acting coronary vasodilator, has repeatedly demonstrated its effectiveness in preventing attacks of angina pectoris in 4 out of 5 cases.[1,2,3]

Prophylaxis with Peritrate results in fewer, less severe attacks, reduced nitroglycerin dependence, improved EKG's where abnormal patterns exist and increased exercise tolerance.

Peritrate's action is similar to that of nitroglycerin but considerably more prolonged... "favorable action [can] be elicited for 5 hours or more after its administration."[4]

Usual dosage is 10 to 20 mg. *before meals* and at bedtime.

The specific needs of most patients and regimens are met with Peritrate's various dosage forms. Peritrate is available in both 10 and 20 mg. tablets; Peritrate Delayed Action (10 mg.) allows uninterrupted continuation of protection through the night.

References:
1. Winsor, T., Humphreys, P.: Angiology *3*:1 (Feb.) 1952.
2. Plotz, M.: N. Y. State J. Med. *52*:2012 (Aug. 15) 1952.
3. Dailheu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.
4. Russek, H. I., *et al.*: Am. J. M. Sc. *229*:46 (Jan.) 1955.

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Mebaral's soothing sedative effect is obtained without significantly clouding the patient's mental faculties.

Average Dose:

Adults—32 mg. to 0.1 Gm. (optimal 50 mg.), 3 or 4 times daily.

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Tasteless tablets of 32 mg. (½ grain)
50 mg. (¾ grain)
0.1 Gm. (1½ grains)
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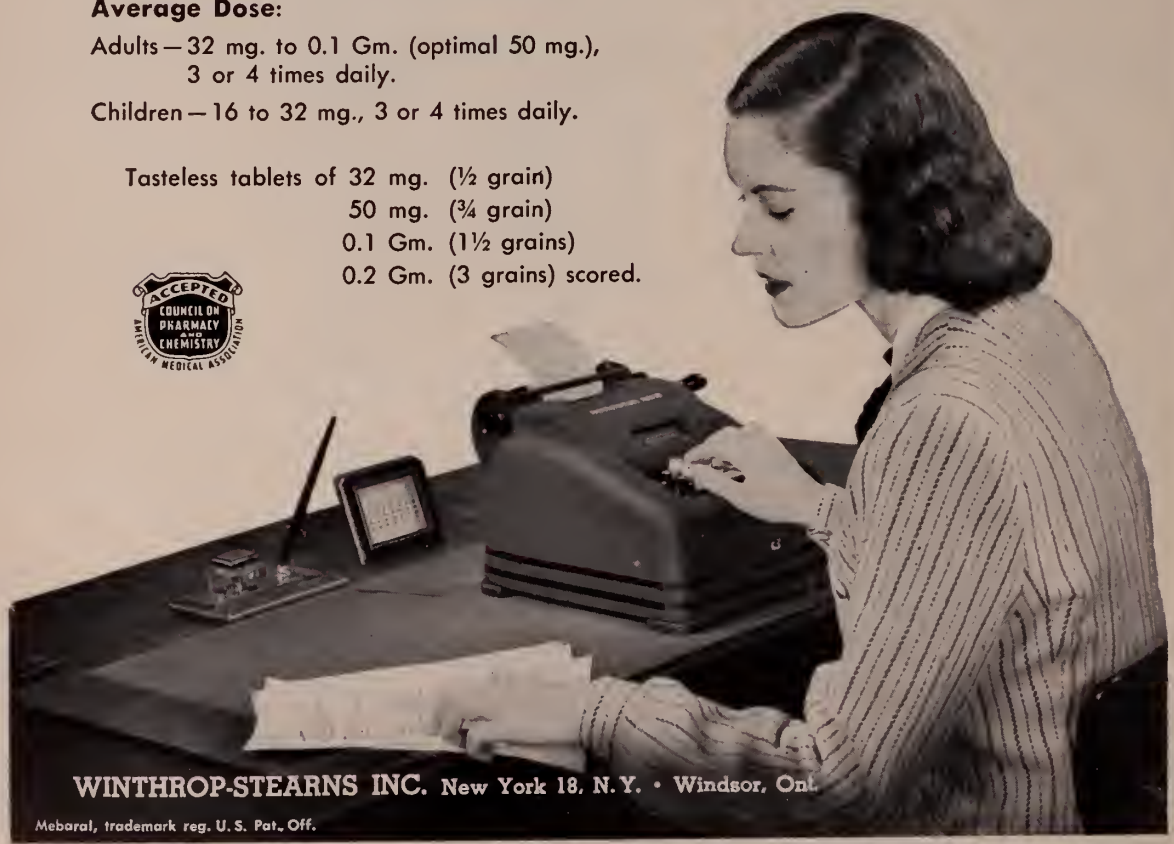

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UROKON SODIUM Sterile Solution 30%

—widely accepted for INTRAVENOUS UROGRAPHY (in routine cases), RETROGRADE PYELOGRAPHY and CHOLANGIOGRAPHY, following the first clinical evaluations by Nesbit and Lapides[1] and Richardson and Rose[2]—provides *adequate* diagnostic films with *minimal* side reactions.[1]

UROKON SODIUM Sterile Solution 70% (CONCENTRATED)

—for INTRAVENOUS UROGRAPHY (in difficult cases), ANGIOCARDIOGRAPHY, CHOLANGIOGRAPHY, TRANSLUMBAR ARTERIOGRAPHY, NEPHROGRAPHY and (in dilution) for RETROGRADE PYELOGRAPHY — was developed to e .tend the use of UROKON to special diagnostic procedures. It is recommended for intravenous urography *in difficult cases,* including obese patients, children under four, and the occasional "average" patient who does not afford adequate shadows with less concentrated media. It gives diagnostic films of *superior contrast* and the incidence of side reactions is moderate[3,4].

[1]Nesbit, R. M. and Lapides, J.: J. Urol. *63:* 1109 (1950).
[2]Richardson, J. F. and Rose, D. K.: J. Urol. *63:* 1113 (1950).
[3]Nesbit, R. M. and Nesbitt, T. E.: U. Mich. Med. Bull. *18:* 225 (1952).
[4]Zinc, O. C.: (Private report dated May 12, 1952).

...a new Standard in Contrast media

UROKON® SODIUM

Sterile Solution 50% *(STANDARD)*
for
INTRAVENOUS UROGRAPHY (in routine cases)
May also be used for CHOLANGIOGRAPHY
and (in dilution) for RETROGRADE PYELOGRAPHY

Widespread experience with UROKON Sodium 30% and UROKON Sodium 70% led to the development of UROKON SODIUM 50% (STANDARD). This medium is applicable to a broader range of patients. Its *superb contrast* and *few side reactions* in routine INTRAVENOUS UROGRAPHY provide films of improved diagnostic quality for the doctor and maximum comfort for the patient.

If you haven't used UROKON...
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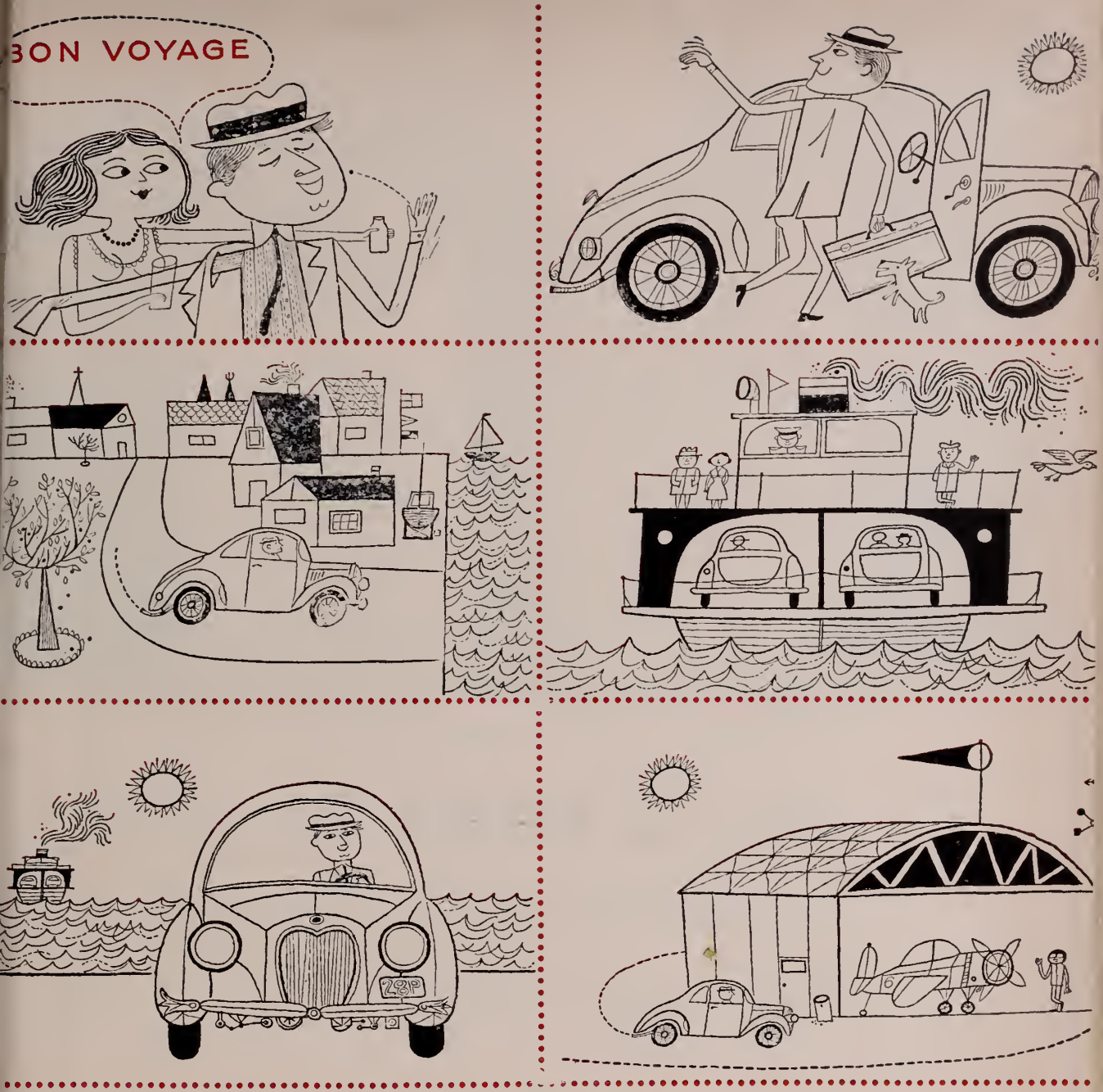

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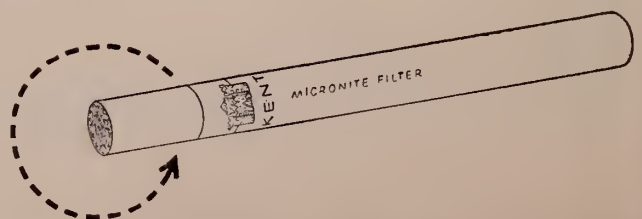

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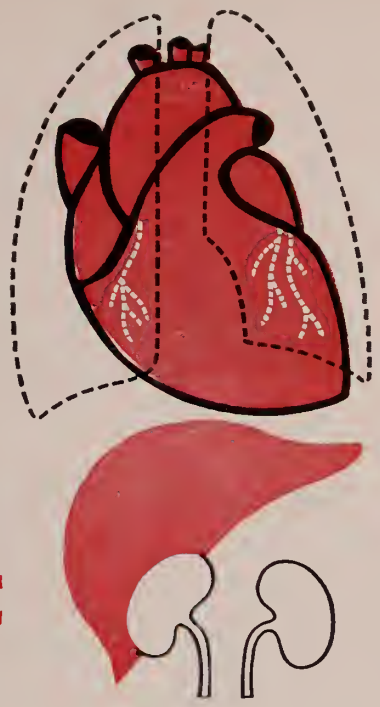

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Editorials • • •

Meet Vince Butler

Baseball's loss is a gain for organized medicine. Our new President, Dr. Vincent P. Butler, is a sports enthusiast, and once played semi-professional baseball. Professional baseball was within his grasp, too, but as between the diamond and the hospital, the hospital won.

Vincent Butler is a Jersey Citian from way back. He was born there, in fact — in 1893. He attended the parochial schools in Jersey City and later prepared himself for college at St. Peter's Preparatory School. From there he entered St. Peter's College, receiving his B.A. in 1914. A year later he won an M.A. in philosophy. In 1954 he was the recipient of an honorary doctorate in science.

He was graduated from Columbia University's College of Physicians and Surgeons in 1919 and then won one of the coveted Bellevue

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internships. A year later he accepted an internship at St. Vincent's Hospital in New York City, and in 1922 returned to his native city to enter private practice. At first he was a regular family doctor — not then an obsolete species — but he developed increasing interest in urology. By 1929 he was able to devote himself exclusively to that specialty. He was elected to the American Urological Association in 1937 and was certified as a diplomate of the American Board of Urology in 1942.

Dr. Butler rose through the ranks at both the Jersey City Medical Center and the St. Francis Hospital of Jersey City, eventually becoming Attending Urologist at both. He is also a consultant in urology at St. Mary's Hospital (Hoboken) and at the Bayonne Hospital.

Always interested in medical-civic activities, Dr. Butler was soon spotted by the leaders of the Hudson County Medical Society as a natural for all sorts of organizational chores. By 1942 he was secretary of that society and remained in that office for seven years. His colleagues then elected him president of the county medical society.

Hudson County could not, however, encompass all of Vince Butler's medico-civic interests. As early as 1938 he was councilor of the State Society's Second District and in 1947 he became chairman of the Judicial Council of The Medical Society of New Jersey. The following year he was named chairman of the Welfare Committee of the State Society. In 1952 he was elected Second Vice-President of The Medical Society of New Jersey and continued since to climb the official ladder.

Vince Butler does not limit his civic activities to the narrow zone of medical activities. He became a Papal Knight, Order of St. Gregory, in 1954. He is a veteran of World War I. He is a Trustee of the Hospital Plan of New Jersey. He has been Chief Medical Examiner of Hudson County since 1952. He is a Trustee of the New Jersey Division of the American Cancer Society.

The list could be extended indefinitely. Vince Butler illustrates the thesis that a busy man always finds time for one more duty . . . and generally gets it, too. The source of the energy needed to fuel all these activities is something of a mystery. Perhaps it is his happy family life. In 1928 he married Rutheilene Lynch of Hackensack. The Butlers have three children: Vincent P., Jr., a graduate of his father's medical alma mater, is now an intern at the Columbia University-Presbyterian Medical Center; Mrs. Daniel J. Sullivan resides in San Antonio, Texas; and James D. is a senior student at Georgetown University in Washington, D.C.

Every inch a President, he brings to his high office a rich and varied background of professional and civic activities. As you see by his picture, he looks like a man of distinction. As a matter of fact, he is.

Blood Money

In Utica (N.Y.) you can pay off a parking fine by giving blood. The rate of exchange is one pint of blood to one parking ticket. Drunken drivers do not have the privilege of infusing some one else with their high-alcohol-content blood. They pay in cash. In its first week of operation, 40 scofflaws indicated that they'd rather give up some blood than part with some money. The barter system might work all right at the traffic court, but let's hope no one will try to pay his doctor's bill that way.

Carroll M. Leevy, M.D.
Louise Fialkowski, M.D.
Angelo M. Gnassi, M.D.
Jersey City

Viral Hepatitis and Its Clinical Variants*

Viral hepatitis is a protean disorder with numerous variations. It mimics many other diseases. It is important to make a correct diagnosis because of the need for proper treatment. The Medical Center group here spell out the composite chemical, histologic and clinical studies needed to make the diagnosis.

Control of viral hepatitis currently represents one of the major problems in medical practice. This is due to lack of effective prophylaxis, difficulties in diagnosis, absence of specific therapy and occurrence of fatalities and chronic liver injury in patients with this disease. This report reviews 184 patients with viral hepatitis treated in the Jersey City Medical Center between 1945 and 1953 with special reference to clinical variants.

EPIDEMIOLOGY

Viral hepatitis is caused by two distinct agents, *virus* "A" or "I.H." which is responsible for the naturally occurring disease and virus "B" or "S.H.," transmitted by parenteral injection of human blood or its products.[1] Viral hepatitis "A" has an incubation period of three to eight weeks and is due to oral-intestinal contamination, although it may be spread by injection. Contaminated water and food supplies have been responsible for several epidemics.[2] The specific source of the virus has often been obscure in patients seen in civilian practice, perhaps due to unrecognized carrier states.[3] In our studies, a kitchen worker appeared to be responsible for transmission of the disease in a local monastery. A pediatric patient was the source of the virus in nine student nurses.

Usually viral hepatitis "A" occurs in children and young adults. Older people also contract the disease. Of 155 patients with this form of hepatitis seen in the Medical Center, 5 (or 3.2 per cent) were over 40 years of age (Figure 1). Clinical recognition was difficult in these patients because of the possibility that other diseases could cause the clinical picture. The disease is more prevalent in the fall and winter months, the largest number of patients being observed from October to March (Figure 2). This has been attributed to closer contact during cold weather. The sporadic nature of many individual instances of hepatitis and suggestive histories in some patients has led to the suspicion that the mosquito may transmit this disease. Geographic studies cor-

*Presented at the Fifth Annual Alumni Day, Jersey City Medical Center, November 1953. This work is from the Departments of Medicine and Pathology, Jersey City Medical Center.

related with age and season show relative immunity in areas with previously high attack rates.

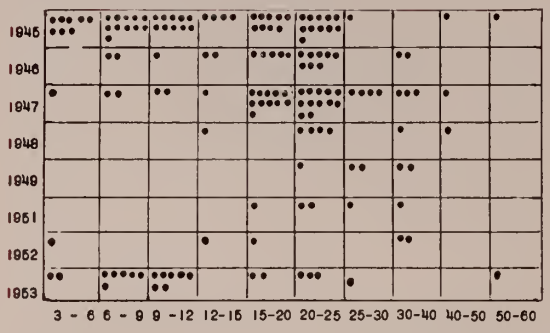

Figure 1. Age Incidence of Patients with Viral Hepatitis "A"

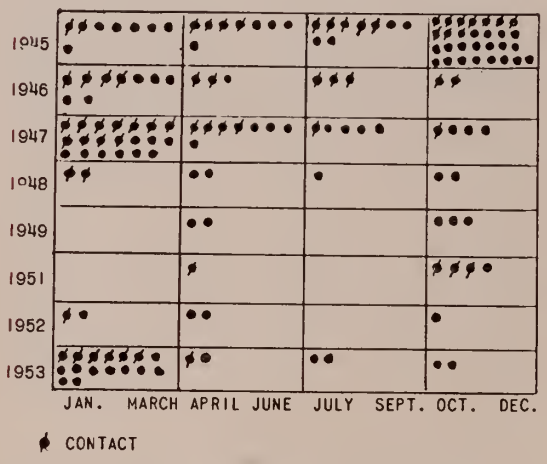

Figure 2. Seasonal Incidence of Viral Hepatitis "A"

Viral hepatitis "B" has an incubation period of two to four months and results from contamination with laboratory materials or the injection of blood or its products. Of 29 patients observed with viral hepatitis "B", its source was infusion of plasma or transfusion of blood in 17, injection of infected blood products or use of non-sterile needles and syringes in 10 and laboratory contamination in 2.

CLINICAL RECOGNITION

CLINICAL recognition of viral hepatitis is possible from the symptom complex and is facilitated by use of biochemical liver function studies and needle biopsy of the liver. Diagnosis is often difficult in the pre-icteric phase where malaise, weakness, fatigue, fever, headache and sensorial changes are prominent. Diagnosis is facilitated with the appearance of icterus and tender hepatomegaly (Figure 3). Atypical clinical features delay diagnosis. Anicteric patients are seen,[4] and in the absence of an epidemic, frequently confuse the physician. Patients referred to our clinic with a presumptive diagnosis of hepatitis without jaundice have had a variety of diseases, including metastatic carcinoma to the liver, cholecystitis, amoebiasis and collagen disease.

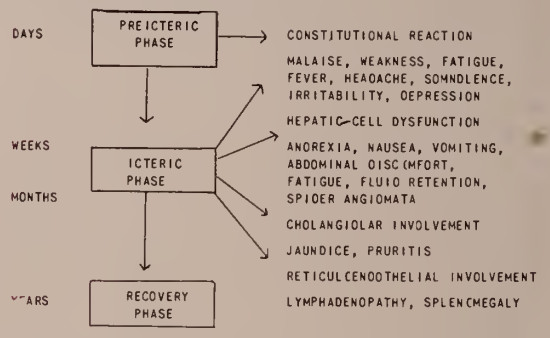

Figure 3. Clinical Course of Viral Hepatitis

The clinical picture of viral hepatitis is altered when it occurs with other diseases. Gastro-intestinal, neuromuscular, hematologic or metabolic abnormalities resulting from liver dysfunction change the symptoms of the primary illness. The chief feature in one diabetic patient was keto-acidosis. A cardiac patient had an increase in fluid retention as the major abnormality. A patient with peptic ulcer had an exacerbation of intestinal symptoms. An intercurrent disease makes diagnosis more difficult. Use of a composite of clinical, biochemical and histologic study has permitted recognition of viral hepatitis in the presence of gall stones, sickle cell disease, congestive heart failure and acute pancreatitis. The value of such an approach is illustrated in patients with sickle cell anemia. Sickle cell crises are commonly associated with icterus, hepatomegaly and biochemical liver function abnormalities which result from the combined effects of anemia and obstruction of hepatic sinusoids by Kupffer cells engorged with phagocytosed red cells. Histologic study

is necessary to differentiate viral hepatitis from this type of hepatic injury.

Prominent neurologic changes and abnormal psychiatric pictures are occasionally seen in viral hepatitis. We have observed 10 patients with marked sensorial changes associated with hepatitis. Pathologic studies show lesions of the central nervous system which account for the encephalitic picture, cranial nerve involvement and peripheral neuritis.[5] Psychiatric syndromes may be due to cortical lesions or represent latent emotional disturbances uncovered by the hepatitis.

A clinical variant of considerable practical importance is severe abdominal pain in the course of viral hepatitis. Four patients were hospitalized because of severe abdominal pain. Internists and surgeons agreed that exploratory laparotomy was advisable. Acute cholecystitis was simulated by right upper quadrant pain, rebound tenderness, slight fever and leukocytosis in 3 patients. One patient had classical symptoms and signs of appendicitis. The operative findings suggested that the pain was due to distention of the hepatic capsule and traction on hepatic ligaments in the patients receiving surgical intervention for cholecystitis. Inflammation of the hepatic parenchyma[8] was felt to be responsible for the pain in the patient suspected of having appendicitis.

Viral hepatitis must be differentiated from liver involvement in amoebiasis,[7] infectious mononucleosis, spirochetal infections and chemical and heavy metal intoxication.[10] It must be distinguished from nutritional liver disease, central necrosis in heart failure, constitutional hyper-bilirubinemia and extrahepatic biliary obstruction. The history, physical examination and laboratory studies permit this differentiation.

BIOCHEMICAL PATTERNS

Biochemical patterns vary in hepatitis depending upon the area of the hepatic lobule involved by the pathologic process. In most instances, the entire lobule is affected. Lesions of the bile duct system cause an elevated serum bilirubin, biliuria, bromsulfalein retention, increase of serum alkaline phosphatase and hypercholesterolemia. Hepatic cell injury causes positive flocculation tests, poor glycogen storage, low cholesterol esters, hypoprothrombinemia, decreased galactose tolerance and abnormal protein patterns. The degree of biochemical change is related to the severity of the pathologic process and the presence of other diseases which influence liver function tests. Biochemical functional patterns often reflect other diseases. Anemia, chronic circulatory congestion or malnutrition contribute to observed abnormalities. Marked alterations in protein patterns are rarely present. Very high globulin levels are occasionally recorded. Liver function studies in acute viral hepatitis have shown bromsulfalein retention in each of the patients, elevation of serum bilirubin in 98 per cent, positive cephalin flocculation in 95 per cent, decreased cholesterol esters in 85 per cent, decreased glycogen storage capacity in 80 per cent and elevated thymol turbidity in 70 per cent. There is a progressive improvement of biochemical alterations in uncomplicated hepatitis and laboratory studies conducted in the recovery phases of the disease may not be helpful.

Liver cell injury without involvement of the biliary system leads to anicteric hepatitis. The diagnosis of hepatitis without jaundice largely depends upon biochemical liver function tests. It is suspected by history of exposure or contact and should be verified by liver biopsy unless it occurs as a part of an epidemic. When the virus affects the biliary system primarily, to produce "cholangiolitic hepatitis,"[11] excretory abnormalities without metabolic dysfunction occur. It is difficult to differentiate the ensuing syndromes from extrahepatic biliary obstruction. Clinical and laboratory findings do not provide the diagnosis and operative intervention with cholangiography is usually necessary. We have observed 6 patients with this type of hepatitis. The following case history is illustrative:

Case 1. A 46-year old housewife was hospitalized because of jaundice associated with pruritis and epigastric distress. Three months before hospitalization, she had received transfusions during a hysterectomy. Examination on admission revealed jaundice, hepatomegaly and splenomegaly. Liver

function studies showed total serum bilirubin 8.5 mg. per cent, "one minute" bilirubin 6.0 mg. per cent, urine bile 3 plus, urine urobilinogen absent, alkaline phosphatase 16 units, bromsulfalein retention 41 per cent, total cholesterol 316 mg. per cent, cholesterol esters 138 mg. per cent, serum albumin 3.8 gm. per cent, serum globulin 2.8 gm. per cent, cephalin flocculation negative, thymol turbidity 2.0 units. Liver biopsy showed biliary stasis. At laparotomy, the gallbladder and biliary tree were normal. Subsequent cholangiographic study showed no abnormality. Her laboratory and clinical changes disappeared during the following two months on a regimen consisting of rest; a high carbohydrate, moderate protein, moderate fat diet; and ACTH.

PATHOLOGY

THE pathology of viral hepatitis has been extensively studied. Three basic lesions are encountered depending upon the amount and virulence of the virus, the resistance of the host and other unknown factors: (1) simple and eosinophilic coagulative necrosis involving primarily the central areas of the liver lobule; (2) massive or autolytic necrosis; and (3) functional alterations of the cholangioles with or without pericholangiolitis. A combination of these lesions is present at times. Biopsy studies have shown a variety of other pathological lesions in the presence of hepatitis. Fatty changes, in alcoholics and diabetics and in other pre-existing hepatic lesions, makes the microscopic interpretation difficult.

In most patients with hepatitis, the hepatic lesions are due to simple and eosinophilic coagulative necrosis. The liver cell nucleus becomes pyknotic and cytoplasm eosinophilic. A hyaline mass is formed and extruded into the space of Disse. This process is accompanied by intralobular and periportal inflammation which chiefly consists of mononuclears with occasional lymphocytes and eosinophiles (Plate IA). Active regeneration of liver cells and Kupffer cells is noted. Serial study usually shows a decrease in the pathological changes within four to six weeks and return to normal in two to three months.[12]

A fulminant viral hepatitis is associated with massive autolytic central necrosis with minimum or no evidence of regeneration. Death occurs in ten to fourteen days. Recognizable liver cells or cords associated with

Plate IA Acute Viral Hepatitis with Necrosis Associated with Intralobular Inflammation

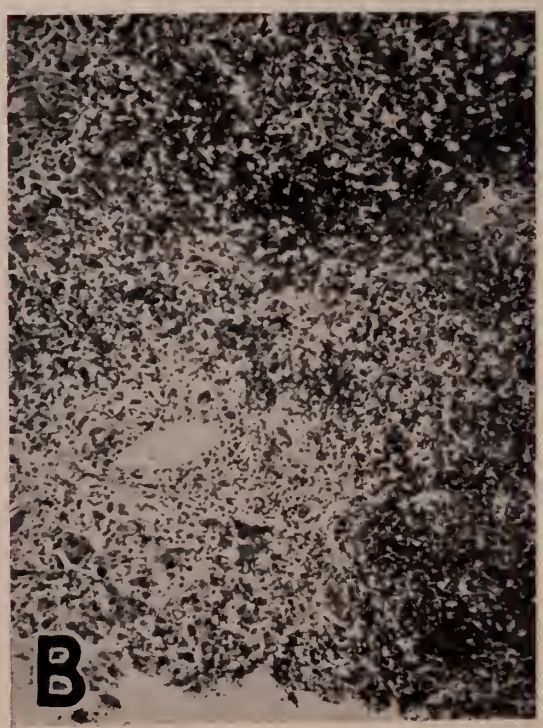

Plate IB Fulminant Viral Hepatitis Associated with Massive Autolytic Necrosis

marked histocytic reaction are limited to the periphery of the lobule in the acute phase. After the fourth day, bile duct and liver cell regeneration are seen (Plate IB). This type of hepatitis occurred in 0.2 per cent of soldiers with the epidemic form of the disease and seems to develop more often in individuals who are malnourished, ill, wounded or fatigued.[13] An epidemic which occurred among menopausal women in Holland suggested an endocrinologic predisposition.[14] No age is immune, the fulminant form of hepatitis having been seen in infants as well as aged persons. We have observed 9 patients with fulminant hepatitis between the ages of 18 and 63. Each of these patients succumbed to the disease.

A subacute fulminant form of viral hepatitis is associated with patchy areas of autolytic necrosis followed by fibrosis, regeneration of liver cells and bile ducts. Death occurs in fifteen to sixty days or the patient may survive to develop diffuse fibrosis or post necrotic scarring (Figure 4). Those who survive over long periods usually have progressive inflammation and fibrosis. Fibrosis of the liver resulting from viral hepatitis has been encountered in 8 (4.3%) patients in this series. The following case histories are illustrative:

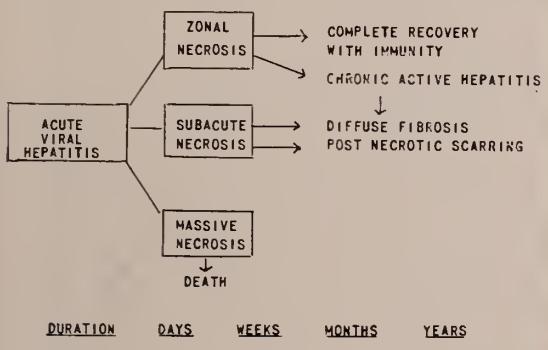

Figure 4. Sequelae of Viral Hepatitis

Case 2. An 18-year old boy was admitted with a history of nausea and vomiting ten days before hospitalization. Physical examination revealed icterus, 1 cm. tender hepatomegaly and cervical lymphadenopathy. Biochemical studies showed a serum bilirubin of 13.6 mg. per cent, alkaline phosphatase 15 units, 4 plus bile, urine urobilinogen 1:1100, serum cholesterol 299 mg. per cent, cholesterol esters 49 mg. per cent, serum albumin 3.45 gm. per cent, serum globulin 4.05 per cent, cephalin flocculation 4 plus. He developed hepatic fetor, became comatose and died. At postmortem, the liver weighed 1250 grams with multiple small nodules and a mottled appearance. Microscopic examination showed diffuse fibrosis, inflammation and regeneration of liver cells (Plate IC).

Case 3. A 12-year old boy, was admitted to the Medical Center in 1945 with a two year history of remissions and exacerbations of jaundice. He had an enlarged liver and spleen. The serum bilirubin was 2.8 mg. per cent, urine bile and urobilinogen, serum alkaline phosphatase 8.7 units, serum cholesterol 183 mg. per cent, cholesterol esters 61 mg. per cent, serum albumin 2.18 gm. per cent, serum globulin 3.32 gm. per cent, cephalin flocculation 4 plus, thymol turbidity 6.5 units. He had remissions and exacerbations of his jaundice and was readmitted with ascites and semi-stupor in 1949. He rapidly regressed and expired. At postmortem we found a nodular hyperplasia in a liver which

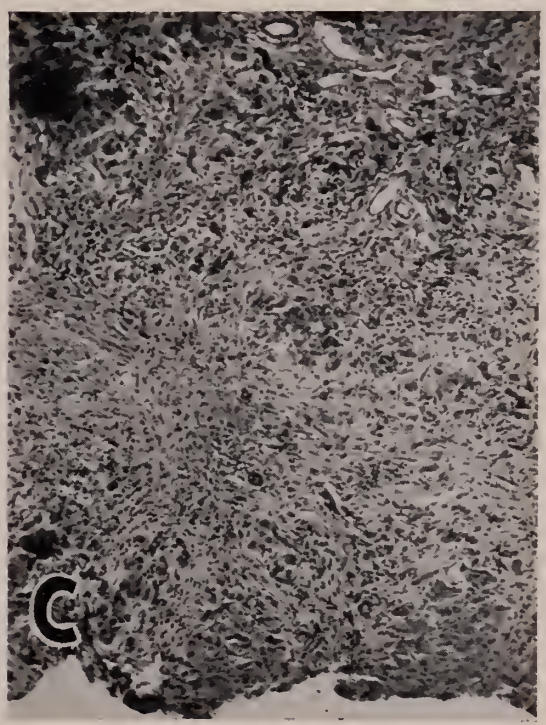

Plate IC Subacute Fulminant Hepatitis with Diffuse Fibrosis, Inflammation and Regeneration of Liver Cells

weighed 900 grams. Microscopic examination showed areas of large bands of connective tissue and bile duct proliferation (Plate ID).

THERAPY

THE natural course of viral hepatitis varies with age, complicating conditions and general immunity. In most instances, recovery from hepatitis is complete within three months.

Chronic hepatitis with persistence of clinical, biochemical and histologic changes for six months to one year has been noted in 10 per cent of our older patients.

The standard form of treatment including rest, and adequate diet and general supportive measures is sufficient in mild hepatitis. Parenteral glucose is desirable with anorexia or poor glycogen stores. Treatment with a broad spectrum antibiotic or with adrenal steroids is helpful if the patient does not otherwise improve. Because of untoward effects of broad

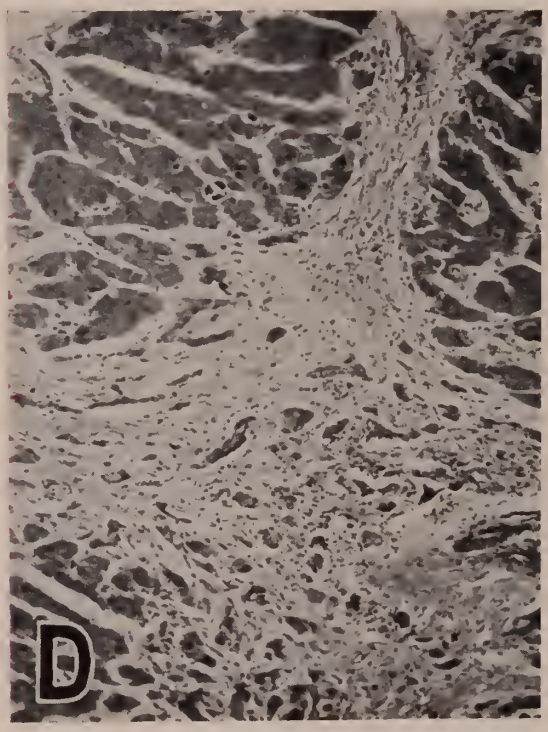

Plate 1D Post Necrotic Scarring Following Viral Hepatitis

spectrum antibiotics and adrenal steroids, these materials should not be administered in the usual form of viral hepatitis where recovery occurs spontaneously. Cortisone and ACTH may induce remissions in patients with severe illness, delayed recovery or relapse; and in cholangiolitic hepatitis with prolonged jaundice.[15] Supplemental lipotropic agents are desirable to prevent fatty changes of the liver which tend to occur with adrenal steroid therapy.[16] Morphine, short-acting barbiturates, ammonium salts and other substances which are detoxified or conjugated by the liver should be avoided in patients who are acutely ill.

Clinical abnormalities due to associated disease states as anemia, infections, vitamin deficiencies and water and electrolyte imbalances require treatment. Careful attention must be given to basic therapy in heart failure, diabetes, peptic ulcer and other chronic illnesses complicated by superimposed hepatitis. Continued observation is desirable until all stigmata of liver injury have disappeared. Activity should be instituted only gradually.[17] Full work responsibilities and fatigue should be avoided for three months. Physical examination and laboratory study should be repeated six months and twelve months after recovery. Criteria for cure of viral hepatitis include: absence of jaundice, hepatomegaly and hepatic tenderness; normal bromsulfalein excretion and cephalin-cholesterol flocculation tests and disappearance of histologic changes.

RELAPSES

Clinical relapse may occur in patients receiving inadequate bed rest and diet. It is occasionally noted with an intercurrent illness. Relapse is characterized by the return of clinical, biochemical and histologic changes. It is most often seen in patients who exercise or ingest alcohol in their immediate post icteric phase. Patients who develop hepatic fibrosis as a result of viral hepatitis require prolonged and intensive hepatotherapy. Fibroblastic proliferation in the liver is not spontaneously progressive and may be curtailed if factors contributing to its development and maintenance are removed.[18]

PREVENTION

The most important aspect of viral hepatatis in relation to public health is its prophylaxis. Hospital personnel should be made constantly cognizant of the hazards of the disease. An intensive program is necessary to prevent the spread of viral hepatitis. Proper disposal of

feces of patients with hepatitis is essential to prevent pollution of water and food. Gamma globulin is desirable in debilitated persons or pregnant women exposed to viral hepatitis "A".[19] Preventive measures for viral hepatitis "B" include: avoiding pooled plasma, routine liver function tests on professional donors and exclusive use of autoclaved needles and syringes. Patients who have recovered from viral hepatatis should not serve as blood donors until they are evaluated for the carrier state.

SUMMARY AND CONCLUSIONS

Diagnosis and treatment of viral hepatitis are often difficult because of variations in its method of spread, clinical features, biochemical findings and pathology. Sequelae depend upon age, host resistance, presence of other diseases and the type of treatment.

The symptom complex and laboratory findings may suggest an acute surgical abdomen, neuropsychiatric disease, obstructive jaundice or complications of an intercurrent disease. Chronic active hepatitis, subacute fulminant hepatitis and fulminant hepatitis are pathologic variants of viral hepatitis which are associated with a high morbidity and mortality.

A composite of clinical, biochemical and histologic study of the liver is desirable in patients with viral hepatitis whose course is complicated or diagnosis is not clear because of the presence of other diseases or atypical features.

ACKNOWLEDGMENT

The authors are grateful for the assistance of Dr. E. V. Rundlett, Director of the Contagious Disease Hospital, where many of the reported cases were studied.

Medical Center

A bibliography of nineteen citations appears in the authors' reprints.

Hypodermics by Belt-Line

The army now has a rapid-fire, if not sure-fire method of giving vaccine injections. It is no longer necessary to needle the poor soldiers. Instead they use a gadget which shoots a tiny jet of the stuff right through the epidermis under 250 pounds pressure. According to the article in the February 10 (1955) JAMA, the idea for jet-propelled hypodermics is old stuff. The new twist here is that instead of its being a one-shot deal, it can be used for mass injections such as those at induction centers and embarkation points. In trial runs, the army has given typhoid vaccine to as many as 1,685 persons daily. These inductees got jet-injected typhoid in one arm and, at the same time, a needle injection of tetanus vaccine in the other arm. Most of the men said the jet injection hurt less, and many said it didn't hurt at all. After a little training, the jet injection operators easily kept up with highly-trained corpsmen using preloaded needles.

The device is run by a motor-driven hydraulic pump. The injector unit is built like an automatic pistol with two triggers. The lower trigger reloads and cocks the piston, and the upper trigger "fires." To give a shot, the nozzle of the injector is placed against the arm. A rubber suction cup keeps the nozzle from moving, since a shift of the nozzle while the jet is being discharged could cause a skin cut. The operator pulls the trigger, waits about one second, and it's all over. Pulling the lower trigger readies the injector for the next man.

Besides speeding up mass injections, the device is an improvement since it does not require sterilization after each shot. The dosage chamber does not require changing but is automatically reloaded from a fluid reservoir.

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Ovarian Pregnancy

In all the world's literature only 84 cases of ovarian pregnancy have been reported. Here is the 85th case.

Ovarian pregnancy is a rare condition. Young and Hawk [2] estimate that it occurs once in every 25,000 to 40,000 pregnancies. Even among ectopic pregnancies, it is rare. Hertig [1] calculates that from 0.7 to 1 per cent of ectopics are ovarian pregnancies.

Since 1922 there have been only 228 ectopic pregnancies at the French Hospital in New York City. Only once before has there been an ovarian pregnancy. These two cases in 228 represent an incidence of 0.8 per cent of ectopic pregnancies.

In all the world's literature, Preston [3] found only 84 cases which satisfied the Spiegelberg criteria for ovarian pregnancy. Thirty-two of these 84 had been reported since 1940. The case reported below is then, the 85th case to be reported.

Spiegelberg's criteria [4] are: (1): that the tube, including the fimbrica ovarica, be intact and the former clearly separate from the ovary; (2): that the gestation sac definitely occupy the normal position of the ovary; (3): that the sac be connected with the uterus by the ovarian ligament; and (4): that unquestionable ovarian tissue be demonstrable in the walls of the sac.

Novak [5] points out that most cases are diagnosed pre-operatively as tubal ectopic pregnancies, twisted ovarian cysts or bleeding ovarian cysts. The case presented followed this pattern, various observers recording independently each of these diagnoses.

CASE REPORT

A 29-year old housewife, gravida VI, para V, was admitted on August 13, 1953, complaining of left lower abdominal quadrant pain of 24 hours' duration, not accompanied by nausea nor vomiting. The pain was sharp and occasionally radiated across the abdomen to the right lower quadrant. Her last menstrual period was July 27, 1953. Abdominal examination revealed marked tenderness in the left lower quadrant with slight rebound. On pelvis examination marked tenderness was found in the left fornix, with tenderness on motion of the cervix. No mass was palpated. The red blood count was 2,300,000 with 9.0 grams of hemoglobin; the white count 9,100 with 81 per cent polynuclears. The erythrocyte sedimentation rate was 26 millimeters in 45 minutes.

Diagnosis on this admission was acute pelvic inflammatory disease. She was treated with antibiotics with improvement both subjectively and objectively. On the fifth hospital day she fainted. Examination did not reveal a cause for the fainting. She was discharged on the seventh hospital day.

Three weeks after discharge, she returned to the hospital stating that three days after going home she had noticed a brownish vaginal discharge. This had lasted two days and was followed by bright

*From the French Hospital in New York City.

1. Hertig, Arthur: American Journal of Obstetrics and Gynecology, 62:920 (1951).
2. Young, A. and Hawk, E. Z.: American Journal of Obstetrics and Gynecology, 26:97 (1933).
3. Preston, G. G.: American Journal of Obstetrics and Gynecology, 63:470 (1952).
4. Spiegelberg, Heinreich: Archives fur Gynekologie, Berlin, 13:73 (January 1878).
5. Novak, Emil: Gynecologic and Obstetric Pathology, Saunders, Philadelphia, Ed. 3. Page 275 (1952).

red bleeding for one day. Five days after discharge she had what she thought was a normal period which lasted two days. She had not been feeling well since going home, had had several "faint spells" and dizziness. Severe abdominal pain had recurred the night before second admission.

Physical examination again revealed tenderness in the left lower quadrant of the abdomen with slight rebound tenderness. A soft tender mass was felt in the cul-de-sac measuring 5 centimeters in diameter. The admitting surgeon made a diagnosis of tubal ectopic pregnancy. Members of the staff added the possibility of twisted ovarian cyst.

The erythrocyte count was 3,700,000 with 10.5 grams of hemoglobin. The white blood count was 8,600 with 75 per cent polymorphonuclears.

Ascheim-Zondek test was reported positive. Urine was consistently clear.

At operation a small amount of dark red blood was found in the peritoneal cavity. The left ovary measured 7 centimeter in diameter and was the site of a marked hemorrhagic reaction. The left tube, slightly tortuous and thickened was not adherent to the ovary. The right tube was dilated and contained blood fluid. The uterus was 1.15 times normal size, very soft in consistency. Left salpingo-oophorectomy and right salpingectomy were performed.

The gross pathology report was:

The specimen consists of left tube and ovary and separately submitted right tube. The right tube measures 9 centimeters in length and one in width. It is extremely hemorrhagic and moderately congested. The wall is thickened and the lumen widely patent in the ampullary portion and narrowed elsewhere. The left tube measures 8½ centimeters in length and has an average diameter of 7½ millimeters. It is shiny and glistening and is normally placed on the mesosalpinx. The fimbria are free and appear grossly normal. The ovary is markedly enlarged to 7 centimeters and is largely converted into a hemorrhagic cyst with a firm red-gray wall. This cyst wall extends from a normal appearing ovarian capsule on one aspect and a corpus luteum on the posterior surface. On section, the hemorrhagic area occupies 5 centimeters of the ovarian tissue. A small smooth lined sac-like area is present close to the corpus luteum which measures 10 millimeters. The remaining ovarian tissue is edematous, but otherwise unremarkable.

Histologic report was: Section of the right tube showed dilatation of the lumen. The villi are broadened and widened. A moderate congestion, edema and lymphocytic reaction are present. Sections of the left tube taken from multiple areas show blood within the lumen but no other change. Sections of the ovary revealed a large corpus luteum which consisted of a hemorrhagic membrane. Within this area, hemorrhagic, mature, double layered chorionic villi are found. The sac mentioned grossly consisted of this membrane. The chorionic villi penetrated into the lutein cell layer itself.

Diagnosis: Ovarian pregnancy.

Fig. 1. External view of ovary and tube.

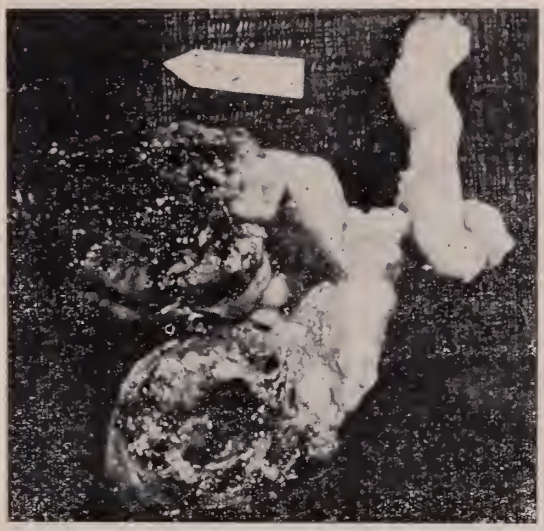

Fig. 2. Cross section of ovary and tube.

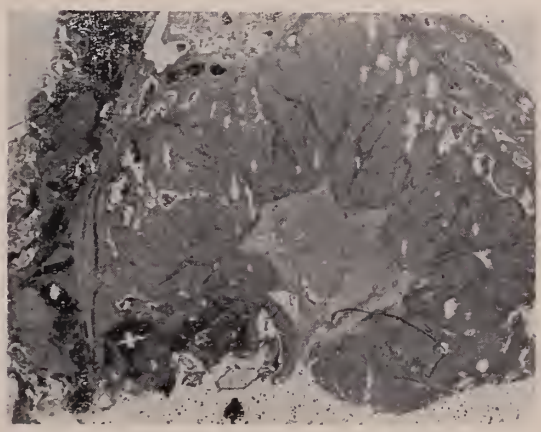

Fig. 3. Chorionic villi invading corpus luteum. Arrow indicates villus.

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A New, Mild Sedative-Hypnotic, A Piperidine Derivative (Noludar)‡

One of medicine's eternal searches is for a sedative-hypnotic which is potent enough to be effective, yet not so strong as to induce unwanted drowsiness or skin lesions; which can be taken without fear of habituation. Dr. Brandman and his colleagues may have something here: a piperidine derivative which in the opinion of 98 per cent of the subjects was as good as, or better than the standard barbiturates, but which appears to be innocent of any toxic effects.

The merits of the barbiturates in tension states and insomnia are firmly established. These drugs are prescribed on an ever increasing scale, although many of these compounds often produce untoward reactions. These reactions include "hangover," over-sedation, headaches, rashes, and in some instances excitation and even delirium. Continued use of the barbiturates may become habitual and lead to tolerance. Even addiction has been reported from continued excessive doses of barbiturates.[1] In the light of all this, any new, nonbarbiturate sedative-hypnotic deserves consideration. Consequently, it was decided to undertake the clinical evaluation of 3,3-diethyl-2,4-dioxo-5-methylpiperidine which originally was submitted under the code designation of Ro 1-6463 and later under the tradename of Noludar.

This drug is a derivative of Sedulon® (3,3-diethyl-2,4-dioxo-piperidine), having a methyl group in the "five"-position. Parsonnet *et al.*[2] reported the parent compound to have been effective in 62 patients who required daytime sedation. However, Sedulon® was subsequently made generally available only in form of a sedative cough syrup.

From the wealth of pharmacologic data on Ro 1-6463 presented by the manufacturer the following findings are of particular interest. The drug is a central nervous system depressant which, when orally administered to mice, is distinctly less toxic and has a more desirable therapeutic ratio than phenobarbital. This can be seen from Table 1.

TABLE 1.

	Toxicity LD_{50} mg/kg	Hypnotic Activity HD_{50} mg/kg	Therapeutic Ratio
Ro 1-6463 (orally)	886	165	5.4
Phenobarbital (orally)	235	87	2.7

Comparative LD_{50} and therapeutic ratios of Ro 1-6463 and phenobarbital.

Similarly, in rabbits, by the intravenous route, Ro 1-6463 is only half as toxic as pheno-

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barbital, the LD_{50} for the former compound being 315 and for the latter substance 170 milligrams per kilogram.

There was no evidence of toxic effects in rats which received Ro 1-6463 chronically (up to 54 weeks) in dietary concentrations of 0.005, 0.03 and 0.18 per cent. Hemograms which were determined at 0, 6, 13 and 24 weeks failed to show any significant changes.

The hematopoietic system of man may be differently affected from that of animals by any drug. Several compounds had been previously reported[3] to have caused aplastic anemia and/or granulocytopenia.[4-12] For this reason, it was decided to determine first whether Ro 1-6463 has any effect upon the blood picture if administered for a prolonged period. The plan was to investigate subsequently the therapeutic efficacy of the drug, provided it failed to show any untoward effect on the hematopoietic system in the chronic toxicity study. As will be shown, careful exploration of this very important question gave no indication that Ro 1-6463 is an offender in that respect. We, therefore investigated its usefulness as a sedative-hypnotic. These two phases of our program are presented below.

STUDY OF CHRONIC TOXICITY

THE plan was to include 500 patients in the chronic toxicity program who were to be introduced in groups of 125 each. These were to have one week of observation without treatment (pre-test period), to be followed by four weeks with daily administration of 1 Gram of Ro 1-6463† (treatment period); then these patients were to have two weeks without medication (follow-up period) to be followed by daily administration of 1 Gram of Ro 1-6463 for one week (re-exposure period).

The following laboratory work was intended for every subject:

1. A complete hemogram (leukocyte count, erythrocyte count, hemoglobin determination, differential count, and thrombocyte count) at the beginning of the pre-test period (first experimental week); at the end of the treatment period (fifth experimental week); and at the end of the follow-up period (seventh experimental week).
2. A leukocyte count and a hemoglobin determination at the end of the pre-test period; at the middle and at the end of the first, at the end of the second and third treatment weeks (second, third, and fourth experimental weeks); at the end of the first follow-up week (sixth experimental week); on the second day of the re-exposure week (eighth experimental week); and on the first day of the following week (ninth experimental week).
3. Weekly urinalysis.

In addition, side effects on the gastro-intestinal tract, central nervous system, cardio-respiratory system, and skin were to be recorded throughout the study.

EXECUTION OF PLAN

THE first group of 125 patients received 750 milligrams of Ro 1-6463 at bed time and 125 milligrams twice a day during waking hours, a total daily dose of 1 Gram, both during the treatment period of four weeks and during the re-exposure period of one week. The remaining 375 patients received 500 milligrams of Ro 1-6463 at bedtime and 125 milligrams twice a day during waking hours, a total daily dose of 750 milligrams both during the treatment period and during the re-exposure period. This change was made because of the high incidence of side effects in the former group. (For details see *Findings*). With this exception, the plan was carried out precisely as blue-printed in advance. Chart I displays the hemogram schedule.

CHART 1.

Period	Week	Blood work done
Pre-test	1st	Complete hemogram
Treatment	2d	White count and hemoglobin (twice in 2d week)
	3d	White count and hemoglobin
	4th	White count and hemoglobin
	5th	Complete hemogram
Medication-free follow-up	6th	White count and hemoglobin
	7th	Complete hemogram
Re-exposure	8th	White count and hemoglobin
	9th	White count and hemoglobin

Chart 1: This is the schedule of hematologic investigations on 500 patients who received massive doses of Ro 1-6463 for four weeks (2d, 3d, 4th and 5th weeks above). After a rest period of two weeks (6th and 7th above) they were re-exposed to the drug (8th week above).

†At the time we embarked on the chronic toxicity study, it was known from pilot experiments that 250 milligrams of Ro 1-6463 generally produced satisfactory sleep in patients suffering from insomnia. Thus the contemplated daily dose of 1 Gram was far in excess of the therapeutic dose. The idea was that if the drug had any toxic effect on the hematopoietic system, this would become obvious more readily after administration of comparatively huge doses.

Total daily dose was reduced to 750 milligrams in the second group of 375 subjects for the reason indicated. With this exception, the plan was carried out precisely as blue-printed in advance.

FINDINGS

1. In none of these 500 patients did the hemograms reveal any untoward effects on the hematopoietic system from chronic administration of Ro 1-6463 at these high dose levels. Urinalyses failed to show any untoward effect on renal function.

2. The following side effects were encountered in the first group of 125 patients who received a total daily dose of one Gram:

nausea	in 125 patients
vomiting	in 42 patients
constipation	in 104 patients
drowsiness	in 125 patients
excitation	in 2 patients
vertigo	in 57 patients
headache	in 124 patients
pruritus	in 16 patients
rash	in 4 patients

A patient was recorded as having encountered any one of these reactions if it occurred but once after the 105 administrations of Ro 1-6463 (3 doses per day for 5 weeks). It seemed possible, therefore, that many of the "side effects" were accidental findings *not* related to the medication. None the less, we decided to reduce the total daily dose from 1000 to 750 milligrams for the remaining 375 patients. This was still far in excess of the therapeutic dose.

In the second group of 375 patients, the following side effects were noted:

nausea	in 32 patients
constipation	in 12 patients
drowsiness	in 176 patients
headache	in 204 patients
vertigo	in 27 patients
rash	in 2 patients
diarrhea	in 1 patient

No side effects were observed in this group in 137 patients.

By decreasing the dose, the incidence of side effects was drastically reduced. Nausea, experienced at least once by every patient in the group which received a daily dose of 1000 milligrams was encountered by only 32 patients in the second group which was given a daily dose of 750 milligrams. Thus, by decreasing the daily dose by 250 milligrams, an incidence of nausea of 100 per cent was reduced to 8½ per cent. The incidence of drowsiness of 100 per cent in the group which received a daily dose of 1 Gram was reduced to 47 per cent in the group which was given a daily dose of 750 milligrams. Side-effects were practically eliminated when therapeutic doses of Ro 1-6463 were administered.

APPRAISAL OF EFFECTIVENESS

WITH this evidence (that excessive doses of Ro 1-6463 given over a prolonged period and re-exposure to the drug at high levels, did not produce any toxic effects on the blood picture) the therapeutic efficacy of the drug was investigated.

The investigation of the therapeutic effectiveness of Ro 1-6463 included a study of the merits of the drug for night and for daytime sedation.

NIGHT SEDATION STUDY

A PILOT experiment was carried out in 15 patients who complained of difficulty in falling asleep. They were hospitalized for various acute or chronic diseases. The dose of Ro 1-6463 was 250 milligrams. This was given for four nights. It produced satisfactory results in terms of the time of onset and the duration of sleep. No side effects were encountered. The patients were well pleased with the quality of sleep. It was therefore decided to evaluate the effects of this dose in a truly significant number of patients.

Case Material: One thousand hospitalized patients—538 males and 462 females — were studied. Their age ranged from 17-80 years (average 51 years). Table 2 lists the age distribution and Table 3 the diseases or procedures for which they were hospitalized.

TABLE 2. AGE DISTRIBUTION OF 1000 PATIENTS TREATED WITH RO 1-6463 FOR NIGHT SEDATION

Age Range	No. of Cases
17-30	104
31-40	110
41-50	164
51-60	350
61-70	235
71-80	37
Total	1000

TABLE 3. DISEASES OR PROCEDURES OF 1000 PATIENTS TREATED WITH RO 1-6463 FOR NIGHT SEDATION

Diagnosis or Operation	No. of Cases
Arterio-sclerotic heart disease	241
Cholecystectomy	28
Diabetes mellitus	77
Duodenal ulcer	73
Fracture	81
Hypertension	223
Hysterectomy	50
Pneumonia	74
Rheumatic valvular heart disease	143
Upper respiratory infection	10
Total	1000

There were three categories of insomnia: 678 patients were pain-free but had difficulty falling asleep; 209 were pain-free but complained of interruption of sleep; and in 113 the insomnia was due to pain. They all had been given phenobarbital, Seconal®, Nembutal® or Tuinal®, single doses of 1½ grains each, prior to the institution of Ro 1-6463. Table 4 lists patients who had received these barbiturates and the incidence of the three categories of insomnia.

PROCEDURE

ORDERS were written to use Ro 1-6463 routinely in place of barbiturates in all patients requiring night sedation and to administer single 250 milligram doses of the experimental drug on three consecutive nights at 9 p.m. Evaluation of the characteristics of Ro 1-6463 was to include observations of onset (induction period), duration and interruption of sleep; recording of side effects; and the patients' own appraisal of the quality of sleep in comparison to that derived from the barbiturate medication they had previously received. Protocol sheets were provided for entry of findings.

Without the availability of special facilities it is difficult to obtain the cooperation of hospital personnel in carrying out the several thousand observations which such a project entails. It would be ideal to have the nursing staff make frequent night rounds to determine time of onset of sleep in each case and again in the morning for recording of duration of sleep. It is impossible to provide such careful supervision in a large-scale experiment without hiring special personnel.

Instead the following plan was devised. Individual groups of patients, as they were introduced in the program, were observed on the three medication days, as follows: on the first night at 9:15 p.m.; on the second at 9:30 p.m. and on the third at 9:45 p.m., *i. e.*, 15, 30 and 45 minutes after the intake of Ro 1-6463. If a patient was found to be still awake at 9:45 p.m., further observations were made that same night at 30-minute intervals. The earliest time interval and the interval next to this at which a patient was found to be asleep were averaged and this was taken as time of onset of sleep in this particular case. For instance, if a patient was asleep on each of three rounds, his average induction period was calculated as the mean between 15 and 30 minutes, that is, as 22½ minutes. Similarly, if a patient was awake at the first tour, but asleep at the second

TABLE 4.

	Phenobarbital	Seconal®	Nembutal®	Tuinal®	Totals
1. Difficulty in falling asleep	121	213	280	64	678
2. Interruption of sleep	54	58	80	17	209
3. Insomnia due to pain	22	41	43	7	113
	197	312	403	88	1000

Distribution of categories of insomnia in 1000 patients who had previously received four different barbiturates. In categories 1 and 2 (above), the insomnia was not due to pain.

and third rounds, his time of onset of sleep was considered to be 37½ minutes. If a patient was awake at the 15 minute round, asleep at the 30 minute tour and awake at the 45 minute round, but asleep at the 1 hour 15 minute round, his induction period was calculated to be the mean between 30 minutes and 1 hour and 15 minutes, or 52 minutes. If a patient was awake at the 15 and 30 minute round but asleep at the 45 minute round, this latter value was taken as his induction period. There were, of course, other patterns of findings, but this was the method applied in determining the onset of sleep.

Observations were made on a similar schedule in the morning for calculation of duration of sleep. Rounds were made for the individual groups of patients, as they were introduced in the program, on the first morning at 3:30 a.m., on the second at 4:30 a.m., and on the third morning at 5:30 a.m., *i.e.*, 6½, 7½ and 8½ hours after "lights-out" hour.

In determining the duration of sleep the longest time interval in relation to "lights-out" hour and the interval next to this at which a patient was found to be asleep, were averaged, 30 minutes were deducted as arbitrary induction period and the resulting figure was taken as duration of sleep in this particular case. For instance, if a patient was asleep at each of the three rounds, his average duration of sleep was calculated as the mean between 7½ and 8½ hours, *i.e.*, 8 hours. Thirty minutes were then deducted resulting in 7½ hours for his duration of sleep. If a patient was found asleep only at one of the three observations, *e.g.*, at the 6½ hour reading, then 30 minutes were deducted and 6 hours were taken as his duration of sleep. Again, there were other patterns of findings, but the calculations were made in a similar fashion.

It was impossible to carry out careful observations on interruption of sleep and in this respect reliance had to be placed on the patients' own statements.

For recording side effects, no suggestive questions were asked. The information sought was elicited by inquiries of a general nature. The appraisal of sleep quality was obtained by asking patients every morning whether the present medication was as good as or better or worse than the drug previously administered.

FINDINGS

From the figures obtained for onset and duration of sleep after 250-milligram doses of Ro 1-6463 administered to the 1000 patients on three consecutive nights the following mean values were calculated:

Average induction period	29 minutes
Average duration of sleep	7 hours

As is seen from Table 5 these measurements were similar in the patients with difficulty falling asleep and in those with interruption of sleep. However, in the patients with insomnia due to pain the induction period was longer and the duration of sleep shorter than in the two other groups.

TABLE 5.

Type of insomnia	Subjects	Average Induction Period in minutes	Average Duration of Sleep in Hours and minutes
1. Difficulty falling asleep	678	27	7 h 12 m
2. Interrupted sleep	209	29	6 h 54 m
3. Insomnia due to pain	113	38	6 h 12 m
	1000		

Average of induction period and duration of sleep following administration of Ro 1-6463 (250 milligrams orally). In categories 1 and 2, the insomnia was not due to pain.

The patients who had complained of interruption of sleep — mostly males in the middle and old age groups — stated that they awoke even while they were on Ro 1-6463. But now they had no difficulty going back to sleep promptly after they returned to bed.

Side effects occurred in 13 patients, an incidence of 1.3 per cent. As reflected in Table 6 all 13 patients complained of drowsiness and vertigo and 12 of them complained of nausea. Whether the constipation which occurred in

four patients was caused by the medication is difficult to decide.

TABLE 6.

Case No.	Drowsiness	Vertigo	Nausea	Vomiting	Constipation
130	1	2	1	0	1
140	1	1	1	0	0
198	1	1	1	0	1
199	1	1	1	0	1
296	1	1	2	0	0
511	1	2	1	0	0
635	2	1	1	0	1
636	2	1	0	0	0
791	1	2	1	0	0
800	1	2	1	1	0
870	1	1	2	0	0
875	1	2	2	0	0
979	1	1	1	0	0
	15	18	15	1	4

Type and frequency of side effects observed in 1000 patients who received 250 milligrams Ro 1-6463 on three consecutive nights (figures in side effect columns denote frequency of occurrence).

The patients' own ratings of sleep quality following Ro 1-6463, in comparison to the barbiturates previously administered, are grouped together in Table 7.

As is seen, 62.3 per cent of the patients thought that results with Ro 1-6463 were "as good" or "at least as good" as with the barbiturates they had been given previously and 35.6 per cent gave preference to the experimental drug. Only 1.9 per cent expressed their dissatisfaction with Ro 1-6463.

DAYTIME SEDATION STUDY

FIVE hundred and ten ambulatory patients—223 males and 287 females—were studied. Their age ranged from 15 to 75 years (average 52.4 years). Table 8 lists the diagnoses.

TABLE 8.

Arterio-sclerotic heart disease	54
Bronchial asthma	25
Bronchitis	30
Hypertensive heart disease	252
Menopause	38
Osteo-arthritis	40
Rheumatic valvular heart disease	71
Total	510

Diagnoses of 510 patients treated with Ro 1-6463 for daytime sedation.

All 510 patients were on phenobarbital grains ¼ three times a day, when the study of Ro 1-6463 was instituted. The barbiturate was replaced by 50 milligrams of the experimental drug three times a day. This amounted to 150 milligrams a day. This regimen was continued for 4 weeks.

In ambulatory patients (most of whom pursue their daily routine) the evaluation of a sedative must be confined primarily to the subjects' own appraisal of its effects on "nervousness," irritability and emotional instability. The 510 patients under study were interviewed at weekly intervals and inquiry was made into the degree of sedation the drug provided. In

TABLE 7.

NUMBER OF PATIENTS WHO RATED

RO 1-6463

Barbiturate	Total number of Patients	Equal or at least equal to previous barbiturate medication	Superior to	Inferior to	Number of Patients Undecided
Phenobarbital	197	82	110	5	0
Seconal®	312	187	119	5	1
Nembutal®	403	306	91	5	1
Tuinal®	88	48	36	4	0
Totals	1000	623	356	19	2

Subjective appraisal of sleep quality, in comparison to four barbiturates, by 1000 patients who received 250 milligrams Ro 1-6463.

addition, for the patients with hypertensive heart disease, blood pressure readings and pulse rate determinations were carried out, whenever they presented themselves for re-examination.

The impression was gained that the degree of sedation derived from 50 milligrams of Ro 1-6463 was equal to that which had resulted in the same subjects from grains ¼ of phenobarbital. All patients were relaxed during the four week trial but they were not over-sedated. Tolerance did not develop as evidenced by the fact that there was no need for increasing the dosage on continued administration. There were no side effects observed, particularly there was no drowsiness or sleepiness noted. All patients expressed satisfaction with the quality of action of Ro 1-6463.

Blood pressure and pulse rate findings remained within the previously established range.

DISCUSSION

Sedation-hypnosis is a complex problem. No doubt there is a place for a central nervous system depressant which is non-alkaloidal and does not belong to the barbituric acid group. Since such a drug presumably would be used by hosts of patients and would not fall in the category of life saving medicaments, it would have to be singularly distinguished by great safety. The findings in the chronic toxicity study done in 500 subjects and presented in this paper are reassuring in this respect. Moreover, Cass and Frederik [13] carried out a similar project. They, too, administered excessively large doses of Ro 1-6463 over a prolonged period to 500 patients, who, after a rest-period of two weeks, were re-exposed to the drug. In their cases, as in ours, careful and repeated hematologic studies showed that Ro 1-6463 had no untoward effect on the hematopoietic system. Thus laboratory data available on 1000 patients who were tested under very stringent conditions revealed no significant changes in either the red or white blood picture.

Side effects, so commonly encountered with other sedative-hypnotics, were very few with Ro 1-6463 when given in therapeutic doses. Indeed, an incidence of drowsiness and vertigo of 1.3 per cent on awakening in the morning must be considered very low. Interestingly, none of the 510 patients included in the daytime sedation study had over-sedation or vertigo.

In terms of safety Ro 1-6463 appears to afford all one can possibly expect from a drug of this type.

The evaluation of the effectiveness of a sedative-hypnotic presents a difficult problem, as does the appraisal of the merits of any drug eliciting responses which are influenced by subjective factors. In that case, only blind studies, including placebo medication, in which the experimental design will permit statistical evaluation of findings, can produce irrefutable results. Yet, careful clinical observations made with a sedative-hypnotic may be rendered meaningful, without these extra precautions, if a truly significant number of patients are included in a study and if some objective measurements are performed.

The work presented was carried out in 1015 patients who required night sedation and in 510 who needed daytime sedation. Even if in a portion of these cases, subjective emotional responses were observed, the two series are so large that the overall results pertaining to the induction period and duration of sleep must be attributed to the sedative-hypnotic effect of Ro 1-6463. This need not necessarily be so with the patients' own appraisal of the quality of their sleep. In this respect, one is completely dependent on the patients' subjective reaction. Therefore, their verdict about the comparative effects of Ro 1-6463 and several barbiturates has only limited significance. Yet there can be no doubt that Ro 1-6463 is certainly as acceptable to the patients as commonly employed derivatives of barbituric acid.

The hypnotic effect of 250 milligram doses of Ro 1-6463 was rated as equal, at least equal, or superior to 100 milligram doses of phenobarbital, Seconal®, Nembutal® or Tuinal® by 97.9 per cent of the patients who had previously received one of these barbiturates. Since 250 milligram doses were very well tolerated, no attempt was made to determine the minimal

dose of Ro 1-6463 which would elicit comparable results. However, it is altogether possible that a lower dose of Ro 1-6463—for example, 200 milligrams—would produce results comparable to those obtained with 250 milligrams.

SUMMARY AND CONCLUSIONS

1. Noludar, or 3,3-diethyl-2,4-dioxopiperidine, also known by its experimental number designation Ro 1-6463, is a new non-alkaloidal central nervous system depressant which does not belong to the barbituric acid group.

2. The effects of chronic administration of Noludar on the hematopoietic system were studied in 500 patients who were given excessive doses nightly for four weeks. After a rest period of two weeks, they were re-exposed to high doses of the drug for one week. Frequent hemograms failed to reveal any toxic effects on the red and white blood picture.

3. Noludar was given for night sedation to 1015 patients. One thousand of these received 250 milligram doses for three consecutive nights. The resulting average induction period was 29 minutes and the average duration of sleep seven hours. Side effects, such as drowsiness, vertigo and nausea were experienced by 13 patients, an incidence of 1.3 per cent. Nine hundred and seventy-nine patients —97.9 per cent—rated the hypnotic effect of Noludar as at least equal, or superior to barbiturates they had previously received.

4. Noludar was administered for daytime sedation to 510 patients, who were given 50 milligram doses three times a day for four weeks. This plan provided sedation comparable to that obtained from grains ¼ of phenobarbital three times a day. There was no drowsiness or over-sedation from Noludar and all patients were pleased with its action.

5. It can be concluded that Noludar is an effective sedative-hypnotic of fairly prompt onset and short duration of action, which, in therapeutic doses, is distinguished by excellent tolerability and which meets with wide patient acceptability.

ACKNOWLEDGMENTS

We here record our thanks to the chiefs of the respective services at both hospitals for permission to carry out this study. Also, we wish to acknowledge the cooperation of Doctors Ralph Miller, Saul Lieb and William Lipstein of the Cardiac Clinic, Board of Health. And thanks are due to Dr. Leo Pirk for his advice and untiring effort in connection with this project.

190 Clinton Avenue (Dr. Brandman)

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Sidney Keats, M.D.
Newark

Braces in the Training of the (Cerebral Palsied) Athetoid Child

In the athetoid child, a brace is not simply a supporting prop, as it is in certain types of paralysis. In athetoid children, the brace must control involuntary movements and permit only directional motion. This puts special requirements on the manufacture and application of such supports. The problems thus presented are reviewed by Dr. Keats

In residual paralysis of poliomyelitis, braces are used chiefly for supportive value, in substitution for the muscles affected by the paralysis, or for limiting joint motion as in foot-drop. For this function, braces for poliomyelitis can be adapted to relatively light materials. In the treatment of cerebral palsy, bracing becomes a more complex problem.

In the athetoids, especially those with tension, there is always excessive motion of the extremities involving joints rather than individual muscles. Braces in this situation are not supportive. The principal purpose of a brace in the athetoid child is the direct control of joint movement. Braces must control the involuntary motions which interfere with the direct pyramidal tract control of voluntary muscles. These purposeless motions interfere with or inhibit the directional motions, so that coordinated joint function is often impossible. The unexpected motions interfere with walking. An essential element in the treatment of the athetoid, is that of eliminating these extraneous motions, by relaxation, and the training of patterns of joint motion from the relaxed status.

Braces in the athetoid, then, are devised to permit only directional motion. They must block the involuntary motions. These braces, by preventing purposeless motion through the joints, not only help reduce the amount of "overflow," but also aid in the development of conscious relaxation. The braces, by blocking involuntary movements, are used in conjunction with functional exercises, to develop patterns of purposeful joint motion, which by constant repetition, become automatic. These automatic patterns eventually become the conscious voluntary patterns necessary for the functional activities of daily life.

"Brace tolerance" must be developed gradually, especially in very young children. The child must not be permitted to become fearful of the braces. For the first few days, only the shoes of the braces should be worn. The braces are then applied very loosely, and then removed immediately for the first day. The time of the wearing of the braces is very carefully increased by small increments daily, so that by the end of a year, the very small child can tolerate the braces throughout the entire day in the stand-up table, walk freely with

them in parallel bars, in the stabilizer, or with the help of crutches. After brace tolerance has developed sufficiently, the child should be permitted to stand up all day in a stand-up table or stabilizer with hip and knee joints locked. Standing balance is developed with the aid of a stabilizer or crutches. The basic reciprocal pattern, developed by table exercises with and without braces, is then projected to the upright position. Constant daily walking practice in parallel bars, saw-horse crutches, skis, or crutches, after balance has been established, will lead to unassisted walking with the braces. By elimination of unwanted motions with braces, and the development of automatic patterns, the braces can be left off for short periods of time, putting them on again when involuntary motions recur. With the braces removed, the gait pattern will approximate that with the braces.

It would be possible to accomplish the same end without braces, if one technician could hold each ankle, others hold the knees, and still others the hips and trunk. This is not practical since a single set of braces can do the same job more effectively. These braces are necessary not only for support in the upright position, but more important, for control of involuntary motions. The braces are therefore called, athetoid control braces. They have to be of sturdier material than braces for residual poliomyelitis. Because of the unusual strength and overactivity of the muscles in the athetoid, the standard type of joint would be sheared off very quickly by lateral and torsional strain. Ball bearing joints, with rotary bearings and side thrust bearings are most enduring in the athetoid control braces, especially in the construction of the hip joints. The friction type of joint does not stand up as well under the stress of involuntary motion. Ball bearing joints provide more normal motion, and with less effort. Relaxation and active motion from the relaxed state is learned more quickly. With athetoid control braces properly executed, the patient performs easily and with little effort, and does not tighten up and fight the braces. The desirable attitude of the patient toward the control braces can only be developed by a course of endless patience and perseverance.

THE full athetoid control brace consists of double bar braces extending from the shoes, with slip-locks on hips and knee joints, with pelvic band, a spring or rigid back brace, and shoulder straps attached to the back brace uprights. The front of the pelvic band may be rigid or soft depending on the degree of athetosis about the hips. In many athetoids, the pelvic band may be uncomfortably tight because of the excessive motion. This may be corrected by applying a back brace to the pelvic band, the back support giving additional leverage in controlling unwanted motion at the hip joints. If the patient has good control of hips, and the involuntary motion "overflows" in the ankle and knees, the pelvic band may be eliminated. Rotational disturbances about the hips may be controlled with long leg braces without pelvic band, and posterior or anterior rotator straps applied to the thigh cuffs as indicated. Where the athetosis involves only the ankle joints and feet, short braces extending just below the knees, with posterior ankle stops to avoid plantar thrust, may be applied.

Athetoid control braces must avoid the use of springs or elastic parts, since these only increase the power of the involuntary motions. This is particularly true at the ankle, where springs, commonly used in foot-drop braces, would give resistance to the athetoid extensor thrust of the foot, and produce a greater tendency toward involuntary plantar thrust. A positive posterior ankle stop must be utilized. The same holds true for the knees where a positive slip lock will hold the joint in full extension without inciting unwanted motion. In teaching the automatic walking pattern with braces, it is advisable to keep the knees locked in extension. The knees can be released at a later date when the walking pattern has been well grooved. Locked knees in walking with braces, also give a greater feeling of security in walking. Balance training must be stressed even more,

with the locked knee position in gait training, since greater balance security can be achieved with slight knee flexion. The straight knee position also avoids many contractures, and overstretching of the quadriceps tendon.

In the selection of the type of back brace to be attached to the pelvic band, the basic issue is the presence or absence of athetosis in the erector spinae muscles. In the presence of athetosis in these muscles, a spring steel back brace should not be used. In most athetoids, the back is very weak, especially in younger children, and spring steel uprights, while providing adequate support, do not completely eliminate flexion and extension. These spring steel uprights will then strengthen the tone of the erector spinae. Where there is athetosis in the back musculature, rigid uprights should be used. Where a back brace is attached to the pelvic band the hip joints should be stopped at 180 degress, and slip locks should be attached for standing purposes.

Braces to control involuntary arm motion in the athetoid child, are devised according to the individual problem. A spoon splint extending to the forearm may be used to prevent wrist flexion commonly associated with finger flexion. A flange may or may not be necessary to avoid extreme ulnar deviation. A leather thumb loop may or may not be necessary to maintain thumb abduction. In other patients, a flat hand splint with thumb platform and soft dorsal hand pad, called a "hand sandwich" brace, may be required at night to avoid overstretching of the wrist and finger extensors. Some patients may require a brace to maintain the full-supinated or mid-supinated position of the forearm. This splint, of necessity, must be carried above the elbow joint. A transverse bar to prevent rotation of the hand through the wrist should be attached. This brace, then, would permit flexion and extension at the elbow joint with the forearm and hand in a position of mid-supination.

31 Lincoln Park

Niacinamide in Arteriosclerosis

The therapeutic value of niacinamide hydroiodide in combination with sodium iodide in generalized arteriosclerosis without hypertension was studied.* Intravenous iodo-niacin injections (5 cc. containing 100 mg. niacinamide hydroiodide and 1 Gram sodium iodide) followed by iodo-niacin tablets (niacinamide hydroiodide 25 mg. and sodium iodide 135 mg.) were administered for more than a year. Dizziness was relieved in 70 per cent of the cases, vague abdominal distress in 87 per cent, headaches in 61 per cent and disorientation in 50 per cent. There was no symptom of iodism or other side-effect in any case, even when large dosages were given.* The complete absence of iodism is attributed to the use of niacinamide hydroiodide.

*Feinblatt, T. M. and Ferguson, E. A.: Amer. Jour. Dig. Dis., 22:22 (Jan. 1955)

Ultrasonic Therapy

High frequency sound waves have been used to relieve the pain of advanced malignant diseases. Lindstrom, of the University of Pittsburgh School of Medicine, used ultrasonic radiation to seal off a small portion of the brain in 17 patients as a substitute for similar treatment previously undertaken by surgery. Writing in the October 1954 Archives of Neurology, Lindstrom said that results of the tests indicated that this technic also could replace surgery in patients with some mental diseases, eliminating unfavorable side-effects of surgical lobotomy. There were no complications or ill effects from ultrasonic treatment, and no apparent tissue damage.

Ten of the 17 patients, who had been suffering excruciating, uncontrollable pain, had practically complete relief for months after treatment and were able to discontinue previously heavy narcotic medication.

Carmine De Vivo, M.D.

South Orange

Spinal Anesthesia With Piridocaine (Lucaine)

Further Investigations and Refinements of Technic*

In many surgical procedures, sensory anesthesia without motor paralysis is a desideratum. In these cases, Dr. DeVivo has found a piridocaine preparation to be an extraordinarily effective agent for spinal anesthesia. This preparation, trade-named as Lucaine® hydrochloride is safe, has negligible effect on blood pressure, permits early ambulation and reduces apprehension.

After using Lucaine† hydrochloride for spinal anesthesia in 680 cases, I concluded that, for procedures where sensory anesthesia without motor paralysis was desired, this drug merited first consideration. It has shown itself superior to any other available spinal anesthesia for obstetrical, proctologic, gynecologic, and urologic procedures. The chemistry and pharmacology of piridocaine have been well documented.[1] I have previously reported [2] on its clinical usefulness.

TECHNIC

Two technics were used in this study [2] depending on the contemplated surgical procedure. One was the saddle block method described by Parmley and Adriani.[3] Spinal puncture was done with the patient in the sitting position. The needle entered between the 3rd and 4th lumbar interspace. Twenty milligrams of Lucaine† hydrochloride dissolved in 2 cc. of 10 per cent glucose solution and 1 cc. ephedrine hydrochloride solution were injected at the rate of ½ cc. per second. The patient then remained in the upright position for 35 seconds following the injection, and then placed in a 10 degree Fowler's position until fixation of the anesthetic agent. This required 10 to 15 minutes. This provided adequate anesthesia for:

1. Ano-rectal surgery
2. Vaginal deliveries
3. Gynecologic surgery, such as: anterior-posterior colporrhaphy; amputation of cervix; colpotomy; excision of bartholin cyst; and dilatation and curettage.
4. Urologic procedures like cystoscopy, pyelogram, transurethral resection and orchidectomy.

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*This work is from the Department of Anesthesia, East Orange (N.J.) General Hospital.

†Lucaine® is the Maltbie Laboratories trade-name for their brand of piridocaine. I here wish to record my thanks to Maltbie Laboratories, Inc., (Newark, N. J.) for generously supplying the preparation used in this study.—C. DeV.

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2. DeVivo, Carmine: Journal of The Medical Society of New Jersey, 49:58 (February 1952)

3. Parmley, R. T. and Adriani, J.: Southern Medical Journal, 39:191 (March 1946)

The second technic produced a low spinal anesthesia. Spinal puncture was again performed with the patient in sitting position through the second or third interspace. The anesthetic mixture was then injected, the patient immediately was placed in a 30 degree reverse Trendelenberg for 20 seconds. The level of sensory anesthesia would ascend to the eighth and motor anesthesia to the eleventh thoracic segment. The following surgical procedures were performed with this technic:

1. Extremities surgery such as saphenous ligation or amputation of the legs.
2. Abdominal surgery, as appendectomy or herniorrhaphy.
3. Gynecologic surgery such as vaginal or subtotal hysterectomy, uterine suspension or salpingo-oophorectomy.
4. Orthopedic surgery such as arthroplasty or hip-nailing.
5. Cesarean section.
6. Urologic surgery, as, for example, fulguration of bladder or suprapubic prostatectomy.

With the Parmley-Adriani method,[3] there may be loss of control of lower extremities but some movement is still possible. It was not possible to obtain the same cooperation from these patients as with the saddle block technic.

Finer and Rovenstine[1] have stated that Lucaine† hydrochloride appears to have a selective action on sensory and autonomic nervous tissue. Conner and Dripps[1] have stated that the level of sensory analgesia precedes that of motor anesthesia by more than two dermatomes which is the ratio of sensory to motor with procaine and tetracaine.

It appears that the amount of sensory involvement or motor paralysis depends on the concentration of the drug. Lucaine† hydrochloride is a weak anesthetic agent and therefore blocks the sensory and motor fibers only where it is most concentrated in the subarachnoid space. As the injected solution migrates in the subarachnoid space, the concentration of the Lucaine† becomes less, and therefore is capable of blocking only the smaller unmyelinated sensory and autonomic fibers (Fibers C) and not the thick myelinated motor (Fibers A).

Obstetrics—In the preliminary report[3] of seventeen cases of saddle blocks for obstetrical vaginal deliveries 30 milligrams of Lucaine† were used in concentrations of either 3 cc. of 10 per cent glucose, or 2 cc. of 10 per cent glucose and 1 cc. ephedrine, or 2 cc. of 10 per cent glucose and 1 cc. of 1 to 1000 epinephrine. Since this work, I have decided on 20 milligrams of Lucaine† in 2 cc. of 10 per cent glucose and 1 cc. of ephedrine for a duration of two hours of anesthesia. If 0.5 cubic centimeters of epinephrine were to be substituted for the ephedrine four hours of anesthesia could be obtained.

In the preliminary report ephedrine was also administered prophylactically in an attempt to overcome nausea and vomiting which appeared to follow the block. However, later work showed that the nausea and vomiting occurred regardless of whether ephedrine was given. The nausea and vomiting occurred in about 40 per cent of the cases. There appeared to be some connection between the nausea and vomiting and when the saddle block was given. If the saddle block was given *before* full dilatation of the cervix there was a greater incidence of vomiting than if it was given after full cervical dilatation. Some success has been obtained by using Nisentil® and Dramamine® for sedation, analgesia and prevention of nausea in the first stage of labor. In 150 cases, using this technic it was not necessary to resuscitate any of the babies.

Genito-Urologic — The advantages of Lucaine† in urologic surgery were quite evident. These patients were usually in the sixth or seventh decade of life and early ambulation was of considerable advantage. No drop in blood pressure was observed. These patients usually had myocardial ischemia and a considerable degree of arteriosclerosis. It was of great advantage not to have a fall in blood pressure.

Rectal — In this group, patients were able to assist in their positioning whether it be to the prone, lateral or lithotomy position. This cooperation was particularly welcome in heavy obese patients. Some cases were supplemented with Pentothal® anesthesia because the patients desired to be asleep. We did not hesitate to give a small dose of Pentothal® to patients

in the prone position following the block. There were no cases of laryngospasm.

CONCLUSION AND SUMMARY

1. Lucaine† is a safe and effective spinal anesthetic agent.

2. In procedures where the introduction of sensory analgesia without motor paralysis is an advantage, Lucaine† hydrochloride was particularly effective.

3. There is a reduced incidence of hypotension following spinal anesthesia with Lucaine† hydrochloride.

4. Early ambulation helps decrease thrombophlebitis or pulmonary complication.

5. Fewer catheterizations are required following Lucaine† hydrochloride spinal anesthetic.

6. There were no neurologic complications when using this weak anesthetic agent.

7. The ability to move the extremities at all times lessened the fear and apprehension experienced by patients under other types of spinal anesthesia.

8. Obstetrical patients appeared to retain a greater voluntary expulsion effort following a Lucaine† hydrochloride saddle block,[3] than when other anesthetic agents were used.

9. There was no greater incidence of nausea and vomiting following a saddle block with Lucaine† than with other anesthetic agents.

140 South Centre Street

New Jefferson Annex

Jefferson Medical College Hospital's new 14-story, $7,500,000 pavilion in downtown Philadelphia was recently opened. This makes the 130-year old institution the third largest voluntary hospital in the nation.

The 300-bed, ultra-modern addition is attached to the Thompson Annex. It accommodates 8,500 additional patients yearly and enables Jefferson to serve 30,000 bed patients annually. The new unit has seven nursing floors with one devoted exclusively to maternity patients. Optional "rooming in" maternity service, maintained by Jefferson for many years, enables babies to occupy an area near the mother's bed.

Each room has its own toilet facilities. Oxygen is piped into each room.

Voice stations at each bedside enable patients to converse with their nurse at her station. A televoice system also allows doctors to dictate reports from many locations to a central automatic recording station.

Fourteen operating rooms on two floors enables Jefferson to centralize all of its operating work in the new building. Expanded radiology and clinical laboratories also occupy individual floors. Another floor for gynecology and obstetrics includes four operating rooms, four delivery rooms and three labor rooms.

The latest and most modern operating and x-ray equipment has been installed. Operating rooms, where ether and other explosive anesthetics may be used, have static arresting floors for controlled discharge of static electricity from staff personnel.

The new pavilion features solaria at the nursing floor levels high above the ground with cantilevered open air balconies facing the south and north. The main entrance, shielded with a canopy of aluminum, leads to the main lobby with its mahogany paneling and marble column facing. A covered roof terrace for convalescent patients crowns the pavilion.

A modern kitchen handles 9,000 meals daily. Prompt and efficient meal service to patients is assured by use of a belt conveyer line to assemble trays.

Telautograph stations in 16 key locations permit doctors and nurses to make electronic transmission of written message to selected station.

A glass enclosed meeting room is located on the roof terrace where a two-story penthouse also shelters some mechanical services.

Robert E. Rich, M.D.*
Newark

Hydrocortisone in the Treatment of Ganglia

A swift, simple and highly effective technic for disposing of a ganglion is here described. Inject a half a cubic centimeter of a saline suspension of hydrocortisone acetate and, in most cases, the ganglion vanishes. In rare instances, a second injection may be needed.

Ganglion is a common condition usually treated by surgical excision. In industrial medicine and in industries where frequent hand and wrist motions with repeated minor trauma occur, the ganglion becomes increasingly important because of loss of time from work, prolonged disability and compensation awards. This paper describes a new and simple method of treatment which requires no special equipment, no period of disability, and no hospitalization. The treatment gives excellent functional and cosmetic results.

Selye [1] has shown experimentally that excessive muscular exercise may stimulate the tissue in close proximity to joints and tendon sheaths and that the response to these stimuli may cause inflammatory irritation, degeneration and cyst formation. This seems to furnish a rational etiology for a ganglion. From this, it follows that the use of an anti-inflammatory substance such as hydrocortisone appears to be a logical way of reversing the process which initiates ganglion formation.

Acting on this thesis, Becker [2] treated thirty ganglia with hydrocortisone [3] and reported complete disappearance of the lesion in 26 cases—that is, a "cure" rate of 87 per cent. There was marked improvement in 4 more cases.

This remarkable result is an impressive step forward in the solution of this problem in industry. In lamp manufacturing* most operators are women who perform finger, hand and wrist motions many times daily with resultant increase in the number of ganglia seen and causing disability.

Former methods of treating ganglia have been unsatisfactory. Many patients refuse surgery. Conservative methods (heat, pressure dressings and pressure dispersion) have been disappointing with periods of disability and frequent recurrence. Surgical excision has always involved loss of time away from the job, hospitalization and the presence of a scar with frequent compensation awards. Following industrial surgery there is always a period

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1. Selye, Hans: Journal of The American Medical Association, 152:951 (July 19, 1953)

2. Becker, W. F.: Industrial Medicine and Surgery, 22:12 (December 1953)

3. The brand of hydrocortisone used in this study was the Merck and Company preparation tradenamed as Hydrocortone® acetate. It is prepared in 5 cubic centimeter vials. Each vial contains a sterile saline suspension in which is suspended 125 milligrams of the hydrocortisone; that is, it contains 25 milligrams per cubic centimeter.

of re-adjustment with many subjective complaints of pain at the operative site, weakness of the limb and utilization of the worker in "light" work for variable periods of time until full recovery has occurred.

With this in mind and having studied Becker's work,[2] I initiated hydrocortisone[3] therapy for the treatment of occupational ganglia in our plant. Below is a preliminary report of three cases. The technic is as follows: A saline suspension of hydrocortisone[3] acetate containing 25 milligrams per cubic centimeter is injected directly into the ganglion without any attempt to aspirate fluid. The skin is sterilized with 70 per cent alcohol. No local anesthetic is needed or used. I prefer the 25-gauge needle, a half inch long. After injecting the hydrocortisone[3] into the ganglion, I apply a small simple dressing and have the patient return to her regular work. The amount of hydrocortisone actually injected depends on the size of the ganglion. I rarely inject less than 0.3 and rarely more than 0.5 cubic centimeters of the hydrocortisone. The patient is seen daily. Repeat injections are given at weekly intervals if they are needed. I have used this in three cases. In all three, there was complete disappearance of the ganglion. One was injected only 8 months before, and one ten months before preparation of this paper. However, in none of the cases has there been any recurrence.

CASE ONE

A 41 year old female lamp maker was first seen in December 1953 with a large swelling on the dorsum of the left wrist of several months' duration. This caused pain which led her to seek operative relief. The operation was scheduled for January 3. But it was then decided to treat her with hydrocortisone[3] injections. On January 18, 1954 a half cubic centimeter of hydrocortisone[3] containing 12½ milligrams in saline suspension was injected into the ganglion. Twenty-four hours after injection there was marked reduction in size of the ganglion. Three more injections were needed to eradicate the ganglion completely. These were given at weekly intervals. Two were 0.5 and one was a 0.3 cubic centimeter dose. There were no subjective complaints and the patient was well satisfied with her end result.

CASE TWO

A 24-year old female first noticed a ganglion on the dorsum of the right wrist in August 1953. She had this removed surgically on October 5, 1953. It recurred on December 18, 1953. On January 15, 1954, 0.5 cubic centimeters of hydrocortisone[3] were injected into this ganglion. Repeat injections of 0.5 and 0.4 cubic centimeters at weekly intervals resulted in complete disappearance of this recurrent ganglion without loss of time or residual disability.

CASE THREE

A 30-year old female was first seen in January 1954, with a ganglion on the dorsum of the left wrist. On January 18, 1954, 0.5 cubic centimeters of hydrocortisone[3] were injected. A repeat injection of 0.3 cubic centimeters was given on January 25, 1954 with disappearance of the ganglion by February 1, 1954.

THERE were no untoward reactions in any of these cases. The workers returned to their regular work immediately after these injections. In case 2 after the first injection, there was moderate pain at the injection site for 2 hours. This has been described by Becker[2] and may be due to leakage or injection of hydrocortisone outside of the ganglion proper. There was no loss of time and no compensation awards in these three cases.

This injection method seems to me to be an ideal, simple and effective treatment of ganglion of the wrist and hand. In the field of industrial surgery where many factors must be weighed in selection of proper treatment, the injection of hydrocortisone proved itself to be the treatment of choice because of simplicity, lack of disability and excellent end results.

2 Chelsea Avenue

Carl P. Guzzo, M.D.
Charles Rich, M.D.
Henry Wujak, M.D.
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Newark

Twisted Dermoid Ovarian Cyst in a Three Year Old*

For the first time in world literature, there is here reported a dermoid ovarian cyst with torsion in a 3-year old child. The diagnosis first was appendicitis, then a nephroptosis. Both diagnoses were reasonable, but both were wrong.

This is the first case in world literature in which a dermoid cyst with torsion is reported in a three-year old child. Dermoid cyst of the ovary is rare in the pediatric age group. Indeed, only about 200 ovarian tumors have ever been reported in children. Only a fourth of these were dermoids; and only 20 per cent of them had torsion of the pedicle.

Ovariotomy was first performed on a child by Dr. Giraldes in 1866. His patient was thirteen years old. In 1882 a 16½ pound tumor was removed by Dr. Chenoworth from a girl of eight. The eminent gynecologic pioneer, Dr. Marion Sims removed a 61 pound tumor from a child eleven years of age. In 1889, Dr. Doran reported bilateral ovarian tumors in a seven month fetus. Dr. Bland Sutton, 1891, cited sixty cases of ovarian tumors of childhood, half of them of the dermoid variety.

CASE REPORT

A three-year old girl entered the Martland Medical Center July 27, 1954, complaining of severe abdominal pain. She had had periumbilical pain and progressive anorexia for four days. On the day prior to admission the pain was so severe that she refused to move about or cause any increase in intra-abdominal pressure, as by defecation or micturition. She preferred to lie with her legs drawn up. She had had no bowel movement for four days, with no response to enema or laxative. The child's abdomen became swollen, intolerable to touch to the extent that the weight of her clothing was the source of great pain. Fever was noted only one day prior to admission. Temperature on admission was 100.8.

She seemed mildly toxic, comfortable when lying still, but distressed when moved. Examination was negative with the exception of the abdominal findings. There was no abdominal component to respiration. She had slight distention of the lower abdomen with no effacement of the umbilicus. Exquisite tenderness was elicited in the right lower quadrant especially at Lanz's point and McBurney's area, with rigidity and guarding. Hyperaesthesia was noted in a triangular area from the right lower quadrant to the inguina. There was rebound tenderness to the right. Rovsing's sign was present. Iliopsoas and obturator signs were positive. Bowel sounds were hypoactive. She had anal spasm. The ampulla was dilated and palpation of the right lower quadrant revealed a tender, cord-like structure. Hemoglobin was 62 per cent. Otherwise the blood picture was normal.

Flat film of the abdomen revealed some disten-

*From the Surgical Service of the Martland Medical Center and the Pediatric Service of St. Michael's Hospital, both in Newark.

tion of the transverse colon and several loops of jejunum.

Pre-operative Diagnosis: Acute suppurative appendicitis.

Operative Note: Under general anesthesia the abdomen was again palpated and with this relaxation a mass, 5 by 4 inches in size, reniform in shape, was palpated. The mass was mobile, soft, cystic, smooth, and showed one area to be indented like the hilum of the kidney. The mobility was striking. You could move the mass beneath the liver on the right and to the spleen on the left. The diagnosis was then reconsidered. A renal condition was postulated, probably a twisted, ptosed kidney.

Right paramedian incision was made in the lower quadrant. When the peritoneal cavity was opened, 10 cubic centimeters of serosanguinous fluid poured out. The incision was enlarged and the mass was delivered. It was found to be connected to the left ovary and tube with a 270 degree twist in its pedicle. A left salpingoophorectomy was done. The other ovary was palpated and was felt to be normal. Here is the pathologist's report:

Cystic type tumor with a smooth capsule mottled gray-blue in appearance, 9 by 9 by 6½ centimeters. The mass was filled with blood tinged fluid. The thickness of the wall varied from 2 to 1½ centimeters. The surface of the wall was smooth with the exception of one portion which contained grumous material.

A portion of the cyst was lined by stratified squamous epithelium, with a moderate amount of keratinization. The stroma of the ovary was infiltrated with blood cells indicating hemorrhage. At one point on the cyst wall there was a small group of sebaceous glands.

Diagnosis: Hemorrhagic dermoid cyst of the ovary.

Post-operative Course: Patient had an uneventful recovery. Sutures were removed in seven days and the patient was discharged.

This case is (so far as can be determined), the only dermoid cyst with torsion ever reported at this age. One must always consider dermoid cysts with twisting of the pedicle in this age group with these symptoms. A history of such intense and progressive pain as revealed in this case, for four days with normal blood picture would tend to rule out the most common childhood abdominal emergency: appendicitis. Left sided pathology may manifest itself with right sided symptoms. In such a case x-ray examination, plus palpation of the abdomen under anesthesia may be helpful diagnostic adjuncts. A pathognomonic sign is the x-ray observation described by Robbins-White, "ovoid mass of diminished density, encircled by a well defined ring of increased density delineating mass from the surrouding tissue." It was not present in this case. Adequate follow-up studies of these children is necessary to rule out cyst formation of the remaining ovary.

SUMMARY

THIS is a report of dermoid cyst of the ovary in a three-year old child. The lesion is uncommon at this age. Diagnosis may be aided by x-ray, or palpation under anesthesia when marked "guarding" prohibits definitive diagnosis. It is a possibility which should be included in the differential diagnosis of acute abdominal problems in the young female.

Martland Medical Center (Dr. Guzzo)

Telephone Infections

You'll rarely catch a cold from a telephone. Examinations were made on 48 telephones in public booths, 38 in an office, and 36 in an office where weekly disinfection included the phones. Although the "disinfected" telephones were cleaner than the others, there was no great difference in the amount of bacterial contamination.*

*J.A.M.A. 155:1094 (July 17) 1954.

S. William Kalb, M.D.*

Newark

What's New in Nutrition

In addition to the drug treatment of infectious hepatitis, the disease requires adjustment in diet. In this brief article Dr. Kalb spells out the step by step features of dietetic management.

Infectious hepatitis is now a reportable disease in our state. From January through July 456 cases were reported to the State Department of Health. We know that many have not been reported. Nutrition plays such an important part in the treatment of this condition that the physicians should become familiar with the dietary treatment of infectious hepatitis.

The primary organ affected by the disease is the liver. Best dietary treatment is a high protein, moderate fat, high caloric diet. High protein is essential for regeneration of liver tissue. High protein helps prevent fat stasis in the liver. The recommended quantity of protein is 19 per cent of the total calories. This means the protein may vary from 100 to 250 grams per day. The usual adult quantity is 150 grams daily.

A high carbohydrate diet is one means of securing high calories, essential in the treatment of this disease. Carbohydrates also have a "protective" effect on the liver and promote healing.

Formerly, low fat diets were recommended, but now a moderate fat diet is urged provided *adequate protein* is eaten. The fat should come from foods such as milk, cream, butter, margarine, and eggs.

DIETARY SUGGESTIONS FOR INFECTIOUS HEPATITIS

Nausea and poor appetite are common in the early stages of this disease. These symptoms often make it difficult for the patient to eat solid food. Under certain circumstances, the intravenous infusion of a 10 per cent solution of glucose in sterile distilled water is a valuable source of carbohydrate for the acutely ill patient. And almost all patients can take a liquid formula made as follows:

2 quarts whole milk; 1⅔ cups skim milk powder; 4 eggs and 1/3 cup sugar.

Beat eggs with sugar. Add milk and mix. Sprinkle milk powder over milk-egg mixture and beat until smooth. This is more palatable if prepared early in the day and allowed to chill thoroughly before using.

Food Values: 164 gms. protein; 100 gms. fat; 271 gms. carbohydrate; 2633 calories.

A sample meal plan for the patient able to take solid food follows:

Breakfast: fruit; cereal with milk and sugar; one egg; 2 slices of toast; ½ teaspoon of butter; 1 tablespoon of marmalade and beverage with milk and sugar.

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*Chairman, New Jersey Nutrition Council

Dinner: lean meat, fish or poultry, 4 ounces; potato; vegetable or salad; 2 slices of bread; ½ teaspoon of butter; 1 tablespoon of jelly; fruit or dessert; milk (skim) 7 ounces; sugar, and tea, if desired.

Supper or Lunch: lean meat, fish or poultry, 4 ounces; potato or substitute; cooked vegetable; salad; 2 slices of bread; ½ teaspoon of butter; a tablespoon of jelly; fruit or dessert; milk (skim) 7 ounces; sugar.

Morning and Mid-afternoon Nourishment: high protein milk (skim) 8 ounces.

Evening Nourishment: high protein milk (skim) 8 ounces and bread and jelly sandwich.

Food Values of Meal Plan: 150 gms. protein; 70 gms. fat; 475 gms. carbohydrate; total equals: 3130 calories. It is more than adequate in all other nutrients.

HIGH PROTEIN SKIM MILK

PUT a quart of skim milk in bowl or pitcher.

Sprinkle a cup of skim milk powder over top. Beat until well mixed. Add flavoring if desired. An 8-ounce serving of this milk gives 16 grams of protein or twice as much as ordinary skim milk.

FOODS TO BE AVOIDED

All fried foods.
All meat high in fat such as fat pork, sausage, goose, duck.
Fatty fish such as sardines.
Cheddar and cream cheese.
Salad dressings, gravies.
Olives, nuts, peanut butter.
Excessive use of condiments especially of pepper.
Gas-forming vegetables and fruits if they give distress.
Hot breads, rich cakes, cookies, pies, and pastries.
Candy made with chocolate or nuts.

416 Clinton Place

Chest Disease Seminar

New Jersey physicians may attend without registration fee any or all of the sessions of the local chapter of the American College of Chest Physicians, to be held at the Ambassador Hotel in Atlantic City June 2 to 5. The program includes a compact postgraduate course in all aspects of diseases of the chest. For details write to Dr. Lewis F. Baum, 406 Centre Street, South Orange.

Cancer Colloquium Scheduled

The third annual Cancer Seminar of the New Jersey Division (American Cancer Society) will be held at the Hotel President in Atlantic City on November 19 and 20. Further information may be obtained from the chairman of the Professional Information Committee, Dr. Joseph I. Echikson, 31 Lincoln Park, Newark.

AMA Clinical Program Now Being Shaped Up

There are still a few vacancies on the lecture program and in the scientific exhibit booths for the Clinical Meeting of the American Medical Association in Boston on November 29-December 2.

Physicians who wish to give lectures will communicate with Dr. T. L. Badger, 22 The Fenway, Boston 15, Mass. Those who wish to set up exhibits should write to the Council on Scientific Assembly of the AMA, at 535 North Dearborn Street, Chicago.

Trustees' Meetings

January 30, 1955

At its January 30 meeting the Board of Trustees:

—Confirmed and concurred in appointments made by the President of Doctors Gerald Fonda, Irvin Levy and Samuel B. Pole to serve on the Medical Advisory Committee to the Glaucoma Detection and Follow-up Program.

—Authorized a Trustees' Parlor at the Ambassador during the 1955 annual meeting.

—Received and accepted reports of the Secretary, the Treasurer and the Executive Officer.

—Authorized the Executive Officer to seek qualified candidates for the position of Assistant to the Executive Officer.

—Authorized a continued re-evaluation of the New Jersey 12-Point Program.

—Adopted the following resolution on the matter of commercial insurance:

> This Society is not in a position to restrict its members as individuals in their association with insurance carriers, and the Society has no such policy of restriction; its members are free to join as many panels as they please so long as there is no question of medical ethics and professional conduct involved.

—Authorized the payment of the deficit bill from the Nonpartisan Committee.

—Authorized the Public Relations Committee to approach the Attorney General of New Jersey with respect to investigating charitable organizations which solicit funds for health purposes in New Jersey.

—Accepted a price of $1750 for the sale to the State of a small parcel of land behind our Headquarters.

March 13, 1955

At its March 13 (1955) meeting, the Board of Trustees:

—Accepted an invitation from the State Department of Health to name an official representative to the 1955 Diabetes Detection Drive.

—Accepted an invitation from the U. S. Public Health Service to send a representative to the Regional Civil Defense Meeting on April 16. Dr. R. Winfield Betts was named.

—Approved the Society's co-sponsoring of a pediatrics course with Seton Hall University.

—Authorized the position of Assistant to the Executive Officer, and approved the naming of a committee to review applicants and hire an Assistant.

—Endorsed the pension plan for Society employees recommended by a special study committee, and recommended the plan for consideration by the House of Delegates.

—Approved an allotment of funds for the A.M.A. Delegates' budget.

—Received the proposed Medical Society budget for 1955-56, approved it to the extent of $106,409, and recommended a per capita 1956 assessment of $25.

—Discussed the proposal to change the dates of the fiscal year and referred it to the Committee on Revision of the Constitution.

—Nominated Dr. Vincent P. Butler for reelection to the Board of Trustees of the Medical-Surgical Plan.

—Approved the 1955 Salk Immunization Program for poliomyelitis provided that the results of the evaluation studies prove the vaccine to be safe and effective.

—Considered A-11 (which would permit an injured employee acting under Workmen's Compensation procedure to select his own physician) but took no action thereon.

—Approved a proposal to modernize the composition of the State Board of Medical Examiners by discontinuing the references to "eclectic" and "homeopathic" members. Directed the Subcommittee on Legislation to cooperate in drafting appropriate legislation.

—Approved the proposal that the fee schedules for welfare clients be worked out on a county rather than on a state-wide basis.

—Approved the recommendation that each county society set up a committee on the care of the chronically ill. Asked that these county committees consider the problem in terms of home care, prevention, services of visiting home-makers, medical care, services of Visiting Nurses, and hospital and domiciliary care.

—Heard and approved the report of the President.

189th Annual Meeting—April 17-20, 1955

The Ambassador, Atlantic City

Official Attendance

County	Delegates	Members	Total
Atlantic	10	78	88
Bergen	31	31	62
Burlington	4	12	16
Camden	16	43	59
Cape May	3	6	9
Cumberland	5	17	22
Essex	60	165	225
Gloucester	4	8	12
Hudson	24	38	62
Hunterdon	3	3	6
Mercer	23	46	69
Middlesex	14	28	42
Monmouth	13	38	51
Morris	12	18	30
Ocean	3	12	15
Passaic	13	35	48
Salem	3	4	7
Somerset	5	13	18
Sussex	3	2	5
Union	34	50	84
Warren	3	1	4
Fellows, Officers, Trustees, Councilors	20	—	20
	306	648	954

Physician Guests	64
Physician Exhibitors	22
TOTAL PHYSICIAN REGISTRATION	1,040
Auxiliary Members	310
Visitors	264
Exhibitors	216
TOTAL REGISTRATION	1,830

FIVE-YEAR COMPARATIVE REGISTRATION FIGURES

Year	Physicians	Others	Total
1955	1,040	790	1,830
1954	1,231	996	2,227
1953	1,012	871	1,883
1952	1,010	785	1,795
1951	865	699	1,564

Scientific Exhibit Awards

Class I—Scientific exhibits of individual investigations, judged on the basis of originality and excellence of presentation:

First Place: Improved Adrenal Denervation for Essential Hypertension

Sherman A. Eger, M.D., Jefferson Medical College, Philadelphia, Pa.

Second Place: Moniliasis in Infants and Children

Bohdan Dobias, M.D. and Walter L. Mitchell, M.D., Babies Hospital, Newark

Third Place: Oral Mercurial Neohydrin® — Clinically Effective Without Renal Toxicity

William A. Leff, M.D. and Harvey L. Nussbaum, M.D., St. Barnabas Hospital, Newark

Honorable Mention: Clinical Effects of a New Steroid (Meticorten®) in Intractable Rheumatoid Arthritis

John W. Gray, M.D., Evelyn Z. Merrick, M.D. and Edward Henderson, M.D., Hospital Center, Orange and St. Barnabas Hospital, Newark

Class II—New Jersey Exhibitors:

First Place: Physical Medicine and Rehabilitation—An Avenue to Functional Living and Independence

Charles R. Brook, M.D., Veterans Administration Hospital, East Orange

Second Place: The Solitary Round Dense Pulmonary Lesion, Diagnosis and Management

Samuel Cohen, M.D. and Frank Bortone, M.D., B. S. Pollak Hospital for Chest Diseases, Jersey City

Third Place: Estrogen Lotion Treatment for Chronic Acne Vulgaris

Irving Shapiro, M.D., Newark

Honorable Mention: Functional Uterine Bleeding

Rita S. Finkler, M.D., Edward Diamond, M.D. and Sylvia F. Becker, M.D., Beth Israel Hospital, Newark

Don't Be the Man Who Wasn't There

If you fail to return your Membership Directory questionnaire copy, you will have only yourself to blame if you are completely left out of the Membership Directory or if the information is incorrect. The absolute deadline on this is June 1. We know from previous experience that there are always a few who keep delaying until too late and then cry because their biographical data are not up-to-date. Don't let this happen to you . . . return that questionnaire today! If you have misplaced it, write to the Executive Offices for another copy.

New Jersey Oncologic Study

Dr. Lewis Webster Jones, President of Rutgers University, the State University of New Jersey, and Mr. J. Harold Johnston, President of the Middlesex Hospital's Board of Trustees, announce an "Oncologic Study Group" at Middlesex Hospital. This is in the Department of Clinical Research of Middlesex Hospital.

The current program, endorsed by the New Jersey Division of the American Cancer Society, is based upon the conviction that medical knowledge will be advanced by the close association of basic scientists and practicing physicians. A five-bed unit has been set up at Middlesex General.

Patients for study and chemotherapy will be chosen by the Study Group from referrals by physicians. Patients amenable to treatment by standard methods and terminal cases will not be accepted. Patients likely to benefit from the treatment or likely to furnish clinical data of significance to the Group will be accepted. At the end of hospitalization, the patient will be returned to the referring physician.

Physicians in New Jersey are invited to refer patients to the Selection Committee. Upon receipt of enough applicants, the first group of five will be admitted for study. The expected period of hospitalization will be about three weeks. Cost to the patient will be $21.00 per day for hospital expenses. No professional fees will be charged by the medical or scientific staff members.

Application forms for admission of patients, and further information are available upon request to: Oncologic Study Group, Middlesex General Hospital, New Brunswick, New Jersey.

Should Your Patient's Child be a Nurse?

Sometimes you have a patient who wonders if she should encourage a daughter in an ambition to become a nurse. You can do the family a favor by getting for them Ruth Sleeper's five-page booklet *Should Your Child Be a Nurse?* Interestingly written and factually sound, the brochure is distributed without charge. Write to Department JCP, New York Life Insurance Co., 51 Madison Ave., New York 10, N. Y.

Announcements • • •

Seton Hall Sets Up First Chair

The president of Seton Hall University has announced that it has received its first grant, that for a chair in proctology at its new College of Medicine and Dentistry. This is made possible by a $3000 grant from the International Academy of Proctology. In accepting the grant on March 26, Msgr. McNulty announced that the proctology chair would be filled by visiting lecturers from other institutions throughout the country.

Multiple Sclerosis Fellowships

Fellowships are now available to promising students and scholars interested in research in the field of demyelinating disease. To encourage the finest talent available, salaries as high as $4000 per year are offered to Fellows who hold a doctor's degree. Stipends may climb as high as $8000 a year for properly qualified scholars. For further details write to Medical Director, Multiple Sclerosis Society, 270 Park Ave., New York, 17, N. Y.

Summer Symposium on Chest Diseases

A symposium for general practitioners on tuberculosis and other chronic pulmonary disease will be held in Saranac Lake from July 11 to 15, 1955. It is approved for 26 hours of formal credit for members of American Academy of General Practice. The course is focussed on the needs of the general practitioner and presented over a period short enough so that they may readily attend. Many of the sessions are informal discussions.

Many doctors attending previous sessions of this symposium have brought their families with them to enjoy the many vacation facilities of the surrounding Adirondack Mountains. So that wives may use the family car, free bus transportation will be provided to the meeting places for the doctors attending the course. Excellent housing accommodations are available in and around Saranac Lake.

Registration fee for the symposium is $40. For further information and copies of the program, write to Dr. Richard P. Bellaire, P. O. Box 2, Saranac Lake, N. Y.

Asthmatics Handbook Now Available

The sixteen page manual *Handbook for the Asthmatic* is now available to physicians and the public. It can be obtained by writing directly to Room 1203, 274 Madison Avenue, New York 16, N. Y. and sending in 25 cents in coin. Larger quantities are available at reduced cost. There are also limited quantities of *Hay Fever and What You Can Do About It* (10 cents per copy) and the free booklet, *Questions and Answers* available on request. There is a nominal charge for 50 or more copies of the *Questions and Answers* booklet.

Gastroenterology Awards Announced

The Ames Company of Elkhart, Indiana and the American College of Gastroenterology jointly announce an award contest for the best papers in this specialty. Special awards are made to fellows, residents and interns. They range from $50 to $250. For further details write to the American College of Gastroenterology, 33 West 60 Street, New York 23, N. Y. The deadline for this contest is September 1, 1955.

Proctologic Convention

The 56-year old American Proctologic Society has scheduled its next annual meeting for the Statler Hotel, New York City, June 1 to 4. Featured are lectures on basic medical sciences relating to gastroenterology and proctology. Papers will also be given on the autonomic nervous system of the colon, the use of local anesthesia, and the proper employment of antibiotics in alimentary surgery. For details write to Dr. W. W. Green at 201 Professional Building, Toledo, Ohio.

Letters to the Journal • • •

In considering the problem of adequate medical care to the poor, it has always seemed odd to me that these people do not clamor for socialized medicine. It is the middle class who seem to wish this so that they may have more to spend on manufactured articles. Since, paradoxically, nearly all educated people live beyond their income (in a manner sanctioned and exemplified by government itself) it would be very nice for all of them if an amount like several hundred dollars a year was lopped off their living expenses. However, they have available to themselves the alternative of setting aside a reserve, or of purchasing insurance protection for their more serious illnesses. This the poor man cannot or should not do for he cannot afford insurance. It is all he can do to feed his family.

Long ago the ethics of medicine became lost in our modern hospitals, where, though doctors still are usually unpaid, the hospital collects from those who should not have to pay; first—because common sense says they cannot afford it; and second — to collect it, families must further lower their living standards and be prey to further illness and strain on moral standards.

It is not our place as doctors to enact social legislation. But, as individuals it *is* our place to suggest, forward and improve social legislation. How can we help our poor without placing ourselves under a federalized system of medicine few of us would wish, a stifling, regimented and humiliating existence?

I would propose that each county medical society arrive at a definition of "medical indigency." This definition could be a gage to separate those entitled to free services from those who should be charged. This criterion, if acceptable to the majority of the members of The Medical Society of N. J., should be used by all component members in their future relations in a professional capacity to the low income group, the poor and the indigent. Thus, they might be given free care and free hospitalization, where not otherwise provided for them.

To effect equity, once the plan is established, the cooperating physician submits the application or apparent entitlement of his patient to the local director of welfare. If the investigation of that patient is favorable, a certificate of eligibility could be issued to the patient, to be renewed or reviewed semiannually. The certificate or card could also be forwarded to the doctor who renders monthly statements according to his normal charges. These individuals I feel will represent a majority of our citizens. Provision should be made for an appeal by the physician for the client, or the client or his attorney-at-law for himself, of any rejection by the local welfare director, to the Judge of the County for final decision as to medical indigency. Medical indigency I suggest would be:

1. Any adult with an annual income of less than $1200.
2. Any childless married couple with an annual combined income of less than $2500.
3. Any family of three with income of less than $3000.
4. Any family of 4 or 5 with income less than $3600.
5. Any family of 6 with annual income of less than $4500. Children over 16 should not be included in the count.

The definition of "medical indigency" should be a state-wide one. I believe there is justice and merit in such a plan. It has been said, "The poor man carries his badge." Wherever he goes he is recognized and abused except by gentle people; in our hearts we know they are ours to care for and to instruct. From them all society spawns. The denial of this, our instinctive ethical urge, reduces our value to ourselves and to society and sets a poor example to those who follow us.

F. J. T. Aitken, M.D.

Bridgeton, N. J.

Authors' Clinic • • •

Too Many Pictures Spoil the Manuscript

Confucius has been charged with perpetrating many aphorisms. He is probably not guilty of having said that "one picture is worth a thousand words" though he is generally blamed for it. (It was probably Anon who first said that one). Anyway, so many doctors are now shutterbugs, and so many hospitals have dark rooms and photographic equipment, that every medical editor has to brace himself daily against the flood of unnecessary pictures. No one today submits a paper with too few. It's the plethora of pictures that depresses editors.

What's wrong with submitting a lot of illustrations? Well, it costs a lot more to print a square inch of picture than a square inch of words. And you can usually say more in the words (Anon to the contrary). So budget-harried editors don't like to see photographs tumble out of the envelope. Even when the author pays for the cuts (as he does in this JOURNAL) editors shy at too many pictures because illustrations are greedy in using up valuable space. Take this magazine for instance. If your paper is accompanied by three pictures each 5½ by 8½ inches, you are consuming three whole pages of JOURNAL space. The members are paying about $100 for that space (not counting what the author pays for the cut). A 3-page scientific article has to be omitted to accommodate those pictures.

We have had authors scream that their papers would be ruined if we did not show pictures of a normal bone. We have heard them insist that the lesion must be shown front-to-back, back-to-front and side-to-side before, during and after treatment. We have conducted wearisome correspondence with authors who felt that rejection of a single sloppy non-illustrative illustration was the moral equivalent of an orchidectomy.

Sometimes you really must illustrate. In plastic surgery, in roentgenology and, to some extent, in dermatology, pictures may be essential. But if the author will put his mind to it, he will discover — to his own astonishment and to the editor's joy—that he may be able to throw out three-fourths of his pictures without hurting the manuscript.

In this JOURNAL, a column is 2 and 7/8 inches wide. We don't like photos that bridge across a column, so the print you submit is probably going to be reduced to 2 and 7/8 inches. That is along the horizontal dimension, of course. The vertical dimension is reduced *pro rata*. If you send us a 5 by 8 photo, the finished cut will be 2 and 7/8 inches wide and —how many inches high? As little Larry will tell you from his school algebra, the ratio is: 5 is to 8 as 2 and 7/8 is to x. Then x is 4.6—say about 4½ inches. So the reproduced picture will be only 4½ inches high not 8 inches high. Does this make the picture too hard to see, the details too small, the wording illegible?

The photograph has to be on glossy paper. Don't send in a "flat" picture, a photo clipped from a newspaper or "pulp paper" magazine. Don't stick labels or lettering on to the surface of the photo. Glossy surfaces don't take adhesive well, and the labels or "stuck on" letters often fall off. Don't submit color photos unless you know that the journal can handle them. Most medical periodicals use color only in advertisements.

Watch that background. If the background is too bright it makes it hard to see light-colored items in the picture. If the background is variegated, it distracts. If the background is too dark, the darker-hued parts of the photo become invisible. Think a little about the background.

If parts within the photograph have to be labelled, take care of that *before* you snap the picture. Little typed or hand-written cards don't show up legibly in photographs as a rule. Assume an average reduction of one-half in one dimension. Ordinary typewriter type is just above the legibility level for presbyopic eyes. If you reduce ordinary typewriter type by half, the resultant wording is readable only by teen-agers. Those of us in the bifocal set can't read that lettering at all. An eighth-of-an-inch for the height of the letter "H" is about the best most of us can do. So, in planning the labelling within the photograph, use a lettering size that will not shrink to below 1/8 inch when the picture is reduced.

To label the photograph, just paste a tab to the *back* of the print, with part of the tab overlapping. Then you can write a short legend on the overlapping part of the tab. If the label has to run for more than five or six words, simply write "Figure 1," "Figure 2" and so on, and then include the full legend in your manuscript. The typesetter sets the

legends and the engraver makes the cuts, so you present them on separate sheets of paper. On one sheet, you write "Legends for Illustrations" or words to that effect. Then type "Figure 1—" and its legend and so on. The photos themselves, with their projecting tabs are *not* pasted on to manuscript sheets. They are sent loose. (Not literally loose. Insert a cardboard stiffener when you mail pictures. Otherwise the envelope will fold and the crease lines will be visible in the finished photograph).

Sometimes you have to write on the back of the photograph—even if only to put your own name on it. Use a very soft pencil. A hard pencil or a pen will make lines faintly visible on the glossy side. Don't clip anything to the photo and don't clip the photo to anything. Reason: the clip makes marks which may not be visible to you but which might appear on the journal page.

Arrange the pictures in the desired order. Do not, however, insist that a certain illustration appear in a specified place or page. The editor will bring the pictures and the appropriate text as close together as he can. But there are certain problems of "make-up" which may make it impossible to do it your way.

If a photograph shows an identifiable human being, be sure to get his permission, in writing. If the patient is a minor, get the parent's or guardian's permission. If the patient has died, get written permission from the heir, survivor, or next of kin. If you are showing an unidentifiable leg or finger, you need not get permission. If you show the face, you must. Perhaps you can make the face unrecognizable by blacking out the eyes and peri-orbital area, or by having the patient wear a mask or bandage before photographing him. Better be sure that he *is* unrecognizable though. Remember that certain deformities are so distinctive that the patient may be identified (or think he is identified) simply by a display of the deformity.

If you are reproducing a previously published picture, get permission of the copyright owner. Maybe it's a photograph you took yourself. Still, if it had been published previously, you need permission to use it again.

If you can group related photographs on a single "plate," do so. It's cheaper to put four illustrations on one cut, than to make four separate cuts. But show a little imagination and artistry in the grouping. Since a journal page is higher than it is wide, the grouped "plate" should also have its long dimension up-and-down.

Do not submit negatives, x-ray films, glass slides, or pencil sketches.

A photograph cannot discriminate between necessary factors and trivia, meaningful features and artifacts. For medical journal purposes it is permissible to "touch up" photos in order to wash out unessential details or artifacts. If the photograph is used as legal evidence, such touching-up is not permissible.

A drawn illustration is better than a photograph in this respect. The artist can omit trivial items, highlight important ones and ignore artifacts. He can schematize the picture so as to show what has to be done or seen in 1-2-3 fashion. In preparing a drawing use India ink. Ordinary writing fluid won't do. Letters must be at least one-quarter inch high to permit 50 per cent reduction. Typewritten labels do not come out well when drawings are reproduced. Use hand lettering.

To indicate items *within* the drawing, use thin leader lines from the word to the appropriate part of the drawing. There is no sense in keying the leader lines to letters or numbers. For instance, you might have a picture of the heart with symbols like "r.v." for "right ventricle" or "s.v." for "semilunar valves." But this makes the reader strabismic since he has to keep shifting his eyes from photo to foot. So spell out the entire legend to the external side of the leader line.

If you want a spot drawing and you don't have a tame artist with you, make a crude sketch, and then sit down with a commercial artist. Have him draw it while you are breathing down his neck.

X-rays can be tricky. Don't send the transparent negative. When you send a positive, remember it has to look to the reader the way it does in a shadow box—the bones light and the lungs dark. Many x-ray details are seen only when transilluminated, and are quite invisible in positive reproductions in magazine pages. Don't prepare an x-ray picture if it won't picture anything.

A graph is a vivid way of showing change. But the cross-hatching of ordinary graph paper will destroy the graph's visibility. Unless the grid-lines are light blue, do not submit a graph on cross-hatched paper. If you do you will get a lot of heavy crossed cross-lines that make your graph look like it's in jail. The best way is to copy the graph on plain white paper, with the tick marks along the base and vertical but with no cross lines at all. Then your graph will stand out vividly. If you don't trust yourself to do it that way, use graph paper with light blue hatching. The ordinary "TPR" chart in a hospital record is useless for this purpose because the cross-lines are heavy black.

Ordinarily if you send a photo or drawing to an editor, you had better kiss it good-by. If you do want it back, better say so in a transmittal letter.

This JOURNAL requires authors to pay for all cuts used to make illustrations. A single cut, less than 3 inches square, may cost you $10 or $12. If you insist on illustrating your paper with 20 pictures, you may get a bill for $200 or $250. For that you can keep the plates. Less thrifty periodicals may allow one or two pictures for free and ask the author to pay for all above that minimum. At any rate, before the author submits drawings or photos he had better brace himself for a bill from the cutmaker.

The editor can play with the author's words. He can squeeze out the water, polish up the dull words, remove the cliches, glamorize the jargon, and lubricate the sticky phrases. But a photograph or drawing is immune from his blue pencil. Perhaps that's why editors are so suspicious of pictures. Pictures have to be right; they can't be righted.

HENRY A. DAVIDSON, M.D.
Editor of THE JOURNAL

Obituaries • • •

DR. HENRY P. DENGLER

Dr. Henry P. Dengler, health officer and school physician of both Summit and Springfield, died on February 11 at the age of 69. Born in New York, Dr. Dengler was graduated from the Jefferson Medical College in 1908. After an internship at Metropolitan Hospital in New York, he returned to New Jersey and opened an office for the general practice of medicine in Springfield. He remained at the same address for over 40 years. He was a member of the Summit Draft Board in World War II, and a consultant in medicine at the Overlook Hospital in Summit.

DR. SHERMAN K. FOOTE

At the venerable age of 81, and after a full and useful life, Dr. Sherman K. Foote of Wyckoff died on February 12. An alumnus of the New York University Medical School, class of 1899, he came to Wyckoff in 1931 and served this area for a quarter of a century. He was a warden of Christ Chapel, Wortendyke, school physician for several communities in northern Bergen County, and generally considered a prototype of the beloved family doctor.

DR. WILLIAM R. WARD

Dr. William R. Ward, one of the emeritus members of The Medical Society of New Jersey, and one of the best known civic leaders in the state, died at the age of 84 on February 10. Dr. Ward was born in New York in 1870 and was a descendant on both his mother's and father's side of Revolutionary families who helped settle New Jersey.

After being graduated from Hahnemann Medical College in Philadelphia in 1893, he engaged in private practice until 1905, when he became a full-time examiner for the Mutual Benefit Life Insurance Co. Seven years later he became medical director of that company. Dr. Ward was active in all facets of civic life in Northern New Jersey, and particularly in Newark. He was a founder of the Florence Crittenton League, chairman of the Near East College Endowment campaign, an officer of the League of Nations Non-Partisan organization, and senior elder of the Elizabeth Avenue Presbyterian Church. He was honorary chairman of Brotherhood Week in Essex County in 1946. For five years he headed Newark's Welfare Federation. During World War II he was president of the local USO Council. He served as chairman of the Newark Housing Council, president of the Newark YMCA, and chairman of the Citizens' Committee which led the successful fight for Newark's current charter. He was designated in 1942 as the city's outstanding citizen.

County Society Reports • • •

Atlantic

The regular meeting of the *Medical Society of Atlantic County* was held at the Children's Seashore House, January 14. Dr. Matthew Molitch, the president, conducted a short business meeting.

Dr. Amedeo Barbanti brought to the Society's attention the existence of a low fee clinic for convulsive disorders. Dr. Barbanti made a motion, which was passed that the clinic be invited to come to Atlantic County.

On recommendation of the Censorship Committee, Dr. Alfred Grunow was elected an Associate member of the Society.

Dr. Mishler reported that the Broadcasting Committee's programs were being received favorably by the citizens of Atlantic County.

Dr. Erber reported that in December 1954, thirty-two emergency calls were smoothly handled through the Emergency Service.

The Atlantic City Hospital Nursing School Choir then presented a program, under the direction of Mrs. Victor Ruby. This was followed with talks by Dr. Elton W. Lance, President of The Medical Society of New Jersey, and Dr. David B. Allman. Both speakers stressed the importance of public relations. A buffet supper followed.

The regular meeting of the *Medical Society of Atlantic County* was held at the Children's Seashore House on February 11. The President, Dr. Matthew Molitch, presided.

The scientific program was conducted by Dr. David Cooper, Associate Professor of Clinical Medicine at the University of Pennsylvania. The subject was "Case Finding in Pulmonary Disease."

At the business meeting which followed, the President stated he had appointed Dr. Joseph Stella and Dr. Walter Stewart as representatives to the "Progress Council." Dr. Stella reported that he attended the meeting on February 4, 1955, during which there was an organization meeting and there may be a further report at a later date.

Dr. Leonard Erber announced that thirty-nine emergency medical calls were handled during the month of January.

Dr. Merendino reported for the Censorship Committee and his report was received and approved.

Dr. Peter Marvel introduced a motion that Dr. David Berner, a practicing physician for many years and President of the Society in 1912, be made an Honorary Member of the Society. The motion was passed unanimously.

Applications for membership to the Society and for elevation from associate to regular membership were received and referred to the Censorship Committee for evaluation.

LEONARD B. ERBER, M.D.
Reporter

Burlington

The regular monthly meeting of the *Burlington County Medical Society* was held at the Log Cabin Lodge, Medford Lakes, on October 14, 1954. We had the pleasure of a joint meeting with the Burlington County Bar Association. The Bar Association had arranged a presentation of an actual Workmen's Compensation case. Aaron Gordon, Esquire, of Jersey City brought a staff of lawyers and physicians who took the positions of attorneys and experts for petitioners and respondents. The case presented was one which had actually been heard in the Workmen's Compensation Bureau. It involved the question of whether multiple sclerosis contracted in the course of employment was compensable. After completion of the case, Mr. Gordon presented a lucid explanation of the Workmen's Compensation Act.

The medical society felt this to be an unusual and memorable program and are much indebted to the Bar Association for their help.

The business meeting included acceptance of the new contract with the Burlington County Welfare Board which raised fees for services to beneficiaries.

Dr. Roland Stratton of Mount Holly, New Jersey, was accepted for membership by transfer from the Gloucester County Medical Society.

President Luis E. Viteri opened the regular monthly meeting of the *Burlington County Medical Society* on November 11, 1954, at the Riverton Country Club. Our guest speakers were Dr. Elton W. Lance, President of The Medical Society of New Jersey and Mr. Richard I. Nevin, Executive Officer of that Society. Their purpose in visiting was to establish liaison with the county society. This also represented the regular visit of the state president to the county society. They discussed the plan whereby the State Society is condensing the processing of reports and committee duties so that problems submitted to them will be acted upon more expeditiously.

The business meeting covered a review of the function of the Grievance Committee and routine committee reports.

Dr. John P. Dirr was elected to membership.

The regular monthly meeting of the *Burlington County Medical Society* was held at the Riverton Country Club, Riverton, on January 13. Dr. Luis E. Viteri presided. Dr. Harry Rogers of the Jefferson Medical College Hospital spoke on new concepts in the treatment of allergic diseases.

The business meeting included a discussion of the Social Security Amendment in so far as it pertained to physicians. The report of the nominating committee was also received.

The treasurer reported about our support of three scholarships in nursing institutions. Our Society annually pays the tuition for the training of three nurses.

Dr. Charles F. Kutteroff was accepted for membership in the society by transfer from the Philadelphia County Medical Society.

J. ARTHUR STEITZ, M.D.
Reporter

Camden

President Harold K. Eynon opened the regular monthly meeting of the *Camden County Medical Society* on January 4, at the Society's headquarters.

Dr. Walter G. Vernon was introduced to the Society after taking the membership oath.

Case Report Night constituted the scientific program and consisted of the following papers: 1) "Occlusion of Central Retinal Artery," presented by Dr. Oram R. Kline, Jr.; 2) "Chorea Gravidarum," presented by Dr. Robert N. Bowen, discussed by Dr. Harold K. Eynon; 3) "Pulmonary Changes in Chronic Pancreatic Disease," presented by Doctors William J. Snape, James G. Dickensheets, and Philip D. Gilbert; 4) "Intrathoracic Tumor of Right Chest," presented by Dr. H. Wesley Jack, discussed by Dr. Alfred S. Conston.

The President announced that Dr. Earl Hallinger was unable to appear before the Society to receive his fifty year certificate. A committee was appointed to wait upon Dr. Hallinger and make the presentation. A recommendation was made for purchasing a permanent plaque commemorating men who had served fifty years of practice in the county. The plaque would be placed in the hallway of the Medical Society Building. An agreeable motion was passed.

The regular monthly meeting of the *Camden County Medical Society* was held on February 1, in the meeting rooms of the Society, with Dr. Harold K. Eynon, President, presiding.

Drs. Mary G. Holderman, William Most, and Charles F. Becker were introduced to the Society after taking the membership oath.

Dr. Robert A. Cooper, Program Committee Chairman, introduced Dr. Hugh D. Palmer, District State Health Officer for the Southern Health District of the New Jersey State Department of Health, who in turn introduced the speakers of the evening, Dr. C. Nelson Davis and Mr. William J. Harris. These guests presented the subject of "Alcoholism" both from the public health and clinical aspects.

Dr. Edward Murray, reporting for the Nominating Committee, advised that due to increased membership we are entitled to an additional delegate and alternate to the state convention. The Nominating Committee presented the names of Dr. Frederick W. Durham as delegate and Dr. John J. Cox as alternate, also Dr. Frank J. Hughes as nominating delegate. These men were duly elected.

Dr. Eynon anounced that he was appointing Dr. Harold Barnshaw as Chairman of the Outing Committee with Dr. Robert N. Bowen and Dr. James N. Barroway assisting.

FREDERICK W. DURHAM, M.D.
Reporter

Cumberland

The February 8 meeting of the *Cumberland County Medical Society* was called to order by the president, Dr. Frank J. T. Aitken. The meeting was held at the Richard's Farm in Bridgeton. Fifty per cent of the Society's members attended.

During the short business meeting the application of Dr. Marvin N. Soloman was favorably considered for membership in the Cumberland County Medical Society. Also approved was the advancement of Associate Members Dr. William S. Fithian, 3rd and Dr. Fred D. Snyder, Jr. to Active membership.

The speaker for the scientific session was Dr. Newlin Fell Paxson, Professor of Obstetrics at Hahnemann Medical College. Dr. Paxson's subject was "Geriatric Gynecology."

Following the short business meeting and the scientific session an excellent dinner was enjoyed.

GEORGE F. RISI, M.D.
Reporter

Essex

Two very interesting meetings were held in close succession in Essex County in February. The first one, on the 19th, was the Videclinic presented by the American Medical Association in co-operation with Smith, Kline and French Laboratories. The "Management of Coronary Artery Disease" was clearly reported and enjoyed by the physicians attending the showing whatever their specialty. Their real interest was proved by the large audience (over 1000 participants) and the fact that many physicians from outside Essex County were present.

The following evening, the *Essex County Medical Society* held its regular meeting jointly with the Essex County Dental Society. The scientific portion of the meeting was preceded by an informal dinner attended by members of both societies.

Dr. Charles G. Darlington, Professor of Pathology at N.Y.U. College of Dentistry reported on a meeting of co-ordinators of cancer teaching who were evaluating the role dentists should play in handling patients with oral malignancies.

The members of the *Essex County Medical Society* may not have become tax experts after their meeting at the Suburban Hotel, on Thursday, March 10, but unquestionably they are better informed than they were previously. Mr. Samuel Foosaner, Consultant in Tax and Pension problems spoke on

"Social Security and Pension Plans for Physicians." He reviewed the whole subject of old age pensions in a most enlightening manner. The audience joined in active discussion.

CAMILLE MERMOD, M.D.

Reporter

Gloucester

In the absence of the president, Vice-President William T. Beall, M.D. presided at the January 20 meeting of the *Gloucester County Medical Society* which was held at the Woodbury Country Club.

Dr. William Likoff, Associate Professor of Medicine at Hahnemann Medical College spoke on "Office Evaluation of Cardiac Patients for Cardiac Surgery." Many questions were answered by Dr. Likoff in concluding a very helpful paper.

During the business meeting, the candidacy of Dr. Luke A. Mulligan of Bergen County for second vice-president was announced.

Following the reading of a letter from Bergen County concerning a fee schedule, much discussion took place, but no definite action followed.

Dr. Isaac N. Patterson gave an interesting report for the Legislative Committee.

With Dr. John J. Laurusonis in the chair, the *Gloucester County Medical Society* met at the Woodbury Country Club, February 17.

First on the agenda was the scientific program, "The Rise and Fall of Anti-Arthritic Drugs." The speaker was Ralph A. Jessar, M.D., Instructor of Medicine, at the University of Pennsylvania. He covered cortisone, butazolidin, gold, aspirin, physiotherapy, and showed some interesting slides on the interarticular injection of hydrocortisone. The discussion was opened by Dr. Rudolph T. DePersia after which many of the members posed questions for the willing Dr. Jessar.

Dr. Donald Eberle of Wenonah was elected to full membership in the society. A request from the Ambulance and Rescue Squadron for medical consultation was referred to the Public Relations Committee.

The candidacy of Dr. Kenneth Gardner of Essex County for Second Vice-President of the State Medical Society was announced.

Concerning the questionnaire on the Corporate Practice of Medicine, the society moved to write a letter to the Medical Director of the E. I. DuPont Co. protesting their treatment of and prescribing for their employees for non-industrial conditions.

It was announced that if the eight counties not now subscribing to New Jersey Blue Cross could muster 51 per cent of their combined membership, we could be covered as a group.

LOUIS K. COLLINS, M.D.

Reporter

Hudson

With Dr. Edward G. Waters presiding, *Hudson County Medical Society* held its regular monthly meeting on February 1 at Murdoch Hall, Jersey City Medical Center.

Dr. Francesco Amoia of Jersey City was elected to membership.

Guest speaker was Dr. Elmer L. Severinghaus, Vice-President for Clinical Research of Hoffmann-LaRoche, Inc., who discussed "The Use and Abuse of Endocrine Therapy in General Practice."

A buffet supper followed the meeting.

On March 1, *Hudson County Medical Society* held its regular monthly meeting at Jersey City Medical Center. The president-elect, Dr. Sigmund C. Braunstein, presided.

Representing the Nominating Committee, Dr. Harold Gorenberg presented the list of nominees for office for the year 1955-56.

A motion giving provisional approval of Hudson County Medical Society to the 1955 Salk Immunization Program carried. (This action was similar in principle and form to that of the Welfare Committee of the State Society in the same matter.)

The Society formally approved and adopted a schedule of minimum fees for use in compensation claim cases.

By formal action at this meeting, the Society's delegate to the State Nominating Committee, Dr. Lynch, was instructed to nominate Dr. Edward C. Waters of Jersey City as a candiate for delegate to the A.M.A., for the period ending December 1957.

The Society approved the recommendation of the Executive Committee that the name of Dr. Herman C. Comora of West New York be submitted to The Medical Society of New Jersey, with the request that he be recommended for membership on the New Jersey Board of Medical Examiners.

Elected to active membership were Dr. Joseph V. Hayden and Dr. Martin W. Pollini, both of Bayonne. Reinstated to active membership were Dr. Sylvester A. Choffy and Dr. Paul F. Sinclair, both of Jersey City.

Guest speaker was Dr. Francis P. Twinem, Assistant Professor of Urology, Cornell Medical School. He spoke on "Traumatic Injuries of the Urinary Tract."

Also on the program—to discuss briefly the State Program for Control of Alcoholism — was Mr. William J. Harris, Chief of the Bureau of Alcoholism Control.

STEPHEN A. MICKEWICH, M.D.

Reporter

Hunterdon

A special meeting of the *Hunterdon County Medical Society* was held at the Hunterdon Medical Center on March 8 for the purpose of discussing the following two items:

(1) Preliminary plans and procedures for administering the Salk Vaccine, if accepted, to the first and second grade children in Hunterdon County.

The Society adopted the following resolution: RESOLVED: That the Hunterdon County Medical Society give provisional approval to the 1955 Salk Immunization Program, provided the results of the evaluation studies of the 1954 program prove the vaccine to be safe and effective.

(2) Proposal for the Hospital Service Plan of the New Jersey Blue Cross to enroll the membership of the remaining County Societies in their program providing a 51 per cent enrollment from the 8 counties can be obtained.

The Society voted to participate in this program and the Secretary was directed to write to the Hospital Service Plan to launch the program.

The Harkers Hollow Golf Club near Harmony, New Jersey was the site of the Annual Meeting of the Hunterdon County Medical Society on March 26. The meeting was held in conjunction with the Annual Dinner-Dance of the Society.

The report of the Nominating Committee was received and as there were no further nominations, the following were elected for 1955-56.

President—Ray E. Trussell; President-Elect — James A. Harps; Vice-President — Morris Parmet; Delegate to State Convention — Michael A. Collella; Alternate — Lonard Rosenfeld; 1956 Nominating Committee — Lloyd A. Hamilton; Alternate —Arthur M. Jenkins; District Judicial Council 2 years — John F. Fritz; County Judicial Committee 5 years—Raymond E. Fidellow.

Dr. and Mrs. Ray E. Trusell were presented with several gifts from the Staff of the Hunterdon Medical Center in recognition of the excellent job they have done during the past several years. Dr. Trussell is resigning as Director of the Medical Center to head the School of Public Health at Columbia University Medical School.

JOHN B. FUHRMANN, M.D.
Reporter

Middlesex

Dr. Malcolm M. Dunham presided at the regular monthly meeting of the *Middlesex County Medical Society,* on February 16 at 9:00 p.m. at the Roosevelt Hospital, Metuchen.

Dr. B. F. Slobodien was appointed as chairman of the Grievance Committee in place of Dr. H. Haywood, who had asked to be relieved.

Dr. Charles H. Calvin, Chairman of the Program Committee, introduced the speaker of the evening, Dr. Curtis L. Mendelson, Professor of Obstetrics at the N. Y. Polyclinic Post Graduate Medical School. Dr Mendelson spoke on "The Management of Heart Disease in Pregnancy."

Dr. W. Edgar Sherman, Chairman of the Special Committee to Investigate Compensation Fees, reported on the return of the questionnaires sent to members of the Society. A sixty per cent response was elicited. The Committee recommended that letters be sent and checks returned by the individual physician to each Insurance Company which pays less than the minimum office fee of $4.00. At present most Insurance Companies are paying the minimum fee.

Dr. Charles F. Church, Chairman of the Public Health Committee, announced that a joint research program has been instituted at the Middlesex General Hospital by the Oncologic Study Group and the Rutgers Bureau of Biologic Research for the clinical use of certain compounds which have shown promise in the treatment of cancer. Five beds are available at Middlesex General Hospital in New Brunswick for patients with cancer. Patients will be admitted on special application by the attending physician.

A motion was made by Dr. Joseph F. Sandella that the County Medical Society approve the project of the Oncologic Study Group at Middlesex General Hospital in conjunction with the Rutgers Bureau of Biologic Research. The motion was passed.

The regular monthly meeting of the *Middlesex County Medical Society* was held on March 16 at the Roosevelt Hospital, Metuchen, with Dr. Malcolm M. Dunham, presiding.

Dr. Henry Haywood, Chairman of the Judicial Medical Ethics Committee proposed Doctors Irving J. Luftman, New Brunswick and Robert J. Zullo, Woodbridge for a two-year period of Associate membership in the Society. Both were elected.

Dr. Calvin, Chairman of the Program Committee, introduced the speaker of the evening — Dr. Michael M. Dasco, Director of the Department of Physical Medicine and Rehabilitation at the Goldwater Memorial Hospital. Dr. Dasco spoke on restorative medicine.

Dr. Slobodien, Chairman of the Medical Liability and Insurance Committee reported that there were 128 affirmative replies to the acceptance of the Hospital Service Plan of New Jersey on a group basis. A minimum of 51 per cent of the Society membership must signify that they will join the Plan as a group before it is acceptable.

Dr. Martha F. Leonard gave a report on the recent county-wide meeting concerning the mass immunization of school children in Middlesex County with the Salk Poliomyelitis vaccine. She proposed the following resolution, which was unanimously approved:

Whereas, the poliomyelitis vaccine developed by Dr. Salk and his co-workers at the University of Pittsburgh has been proved to be safe and to be effective in producing significant titers af antibodies against all three major strains of poliomyelitis, and

Whereas, the 1955 poliomyelitis vaccine program has been carefully planned by official representatives of the American Medical Association, the American Academy of Pediatrics, The American Public Health Association, and the United States Department of Health, Education and Welfare, and the National Foundation for Infantile Paralysis,

Therefore, be it resolved that the Middlesex County Medical Society formally approve the plan of mass inoculation of all first and second grade children in the public, private and parochial schools of the county, whose parents request such inoculation, provided that the Poliomyelitis Vaccine Evaluation Center under Dr. Thomas Francis finds the vaccine effective in preventing poliomyelitis under natural conditions and that the vaccine is licensed by the National Institutes of Health.

Dr. Dunham announced the appointment of the following members to serve on the 1955 Nominating Committee: Drs. Edward Brezinski, Chairman; B. F. Slobodien and S. David Miller.

IVAN B. SMITH, M.D.

Reporter

Monmouth

The Sixth Annual Winter Dinner-Dance of the *Monmouth County Medical Society* was held at the Berkeley-Carteret Hotel in Asbury Park, on January 15. This winter social function set a new record of 208 members and guests attending.

A symposium on 'Cardiovascular Surgery" was held at the regular meeting of the County Society on January 26 at Monmouth Memorial Hospital. Dr. Alfred Henderson served as moderator. Speakers included Dr. Ralph Deterling Clinical Associate Professor of Surgery, Columbia University; Dr. Harold Gabel, Dr. Vincent Whelan, and Dr. Edward Banta, of the Monmouth Memorial Hospital Staff.

At the business meeting which was conducted by Dr. Howard Pieper, the president, the following were elected to Active membership: Drs. Vincent J. Fazio, Joseph M. Fitzgerald, and Frederick M. Offenkrantz, of Red Bank. Courtesy membership was extended to Dr. Jerome Gelb, Asbury Park, a member of Essex County Medical Society.

The Nominating Committee presented the following names in nomination for offices to be voted upon at the regular February meeting: President, W. F. Jamison; President-Elect, John W. Hardy; Secretary-Treasurer, Morton Trippe; Assistant Secretary-Treasurer, David McCreight; Reporter, Donald W. Bowne. The following were nominated from the floor for the Executive Committee: Sidney Hodas, Lester Barnett, Peter Guthorn, Francis Pflum and George Green.

The regular monthly meeting of the *Monmouth County Medical Society* was held at Monmouth Memorial Hospital, Long Branch, on February 23, with Dr. Howard Pieper, the president, presiding. The following officers were elected for 1955-1956: President, William F. Jamison; President-Elect, John W. Hardy; Secretary-Treasurer, Morton F. Trippe; Asst. Secretary-Treasurer, David W. McCreight; Reporter, Donald W. Bowne.

The following were elected to the Executive Committee for three year terms: Drs. Lester A. Barnett, George G. Green and Francis A. Pflum. Dr. Abraham Rosenthal was elected to the Judicial Committee for a five year term, and Dr. Stephen R. Casagrande was elected to the District Judicial Council for a two year term.

Elected as delegates to The Medical Society of New Jersey were: Drs. Daniel Featherston, Joel Feldman, Morton Trippe, Harry Brindle, Paul Bornstein, Theodore Schlossbach and Lester Barnett. Alternate delegates were: Drs. Samuel Edelson, Andrew Dedick, Anthony DeVita, Howard Pieper, Donald Bowne, Richard Demaree and George McDonnell. Drs. Daniel Featherston and Louis Albright were named Nominating and alternate Nominating Delegates respectively.

Dr. William J. Woodward, Asbury Park, was elected to active membership in the Society and Dr. L. Glenn Barkalow, Freehold, to associate membership.

Dr. Harold T. Hyman, renowned lecturer and author spoke on "The Role of the General Practitioner in Prognosis."

DONALD W. BOWNE, M.D.

Reporter

Morris

On Thursday, February 17, the *Morris County Medical Society* met for its regular February meeting. The meeting took place in the Warner Chilcott Laboratory, Morris Plains. Dr. Nicholas Bertha presided.

After the usual business transactions, Dr. Herman Shlionsky, training instructor in the New York Institute for Psychoanalysis, spoke on "Pseudodynamics in General Medicine." He reviewed in considerable detail the problems facing physicians in regard to management of patients. He dwelt on the development of rapport and reciprocal understanding. The speaker further explained physicians' responsibility in interpretation to the patient and cautioned against the physician advising patients to take major steps in changing their life pattern.

The regular March meeting of the *Morris County Medical Society* took place in the Morris County Welfare House on Thursday, March 17.

At the request of the Morris County Board of Chosen Freeholders, the Morris County Medical Society met in the Welfare House. This provided an opportunity for the physicians to see the newly built structure designed to comfort the needy in their old age and to please the eye of the viewer.

Dr. Sophia Kleegman spoke about the "pre-marital interview," from the gynecologists' point of view. Dr. Kleegman stressed that pre-marital examination and advice should come from the family physician and that the physician should consider it his duty to assist a couple embark upon marriage

so that their chances for success and happiness will be greater. The speaker further disenssed sex technic and contraceptive devices.

The Board of Freeholders were host to a collation following the meeting.

ALBERT ABRAHAM, M.D.
Reporter

Passaic

The regular monthly meeting of the *Passaic County Medical Society* was held on January 18 at the Medical Society Building. Dr. Thron, the President, presided. This session was held jointly with the Passaic County Heart Association and was preceded by a film on cardiac surgery.

The following were elected to Active membership: Alphonsus L. Doerr, Clifton; Henry R. Shinefield and Gerhard R. Hirschfeld of Paterson. The Associate members elected were: Joseph M. Gortych and Richard Rosendale of Wayne Township.

A proposed amendment by the Committee on Constitution and By-Laws was read and voted upon. The following amendment was accepted to read:

ARTICLE VII

Funds and Expenses

Section 3. Paragraph 4—which reads in part shall be amended to read:

"The Board of Censors shall have the right to waive the annual dues in whole or in part, for a fixed or for an unlimited period, of any member in the Society who (a) shall have attained the age of 70 years or (b) is serving with the armed forces of the United States, or (c) may be in financial distress or (d) is retired from active practice, or for any other reason deemed sufficient by them."

Dr. Thron stated that it will soon be necessary to assemble a list of Delegates and Alternates to the Annual State Meeting and suggested that any member who would like to be a delegate could leave his name in the office of the Society.

The president then turned the meeting over to Dr. David Roth who introduced Irving S. Wright, M.D., Professor of Clinical Medicine, Cornell University Medical College. Dr. Wright spoke on "Recent Advances in the Treatment of Coronary Artery Disease."

At the conclusion of the question period, refreshments were served.

The regular monthly meeting of the *Passaic County Medical Society* was held on February 15 at 9:00 p.m. at the Medical Society Building. Dr. Thron, the President, presided.

The following physicians were elected to Active membership: Hayward W. Chappelle of Paterson and Sidney Cohn of Passaic.

Dr. Thron again urged those in arrears in the payment of Building Assessments, to bring their payments up-to-date in order to be in good standing in this Society. He further explained the necessity of paying County and State dues for a member in good standing and to have their names appear in the Official List of The Medical Society of New Jersey. He announced the receipt of several copies of Melchior Palyi's *Compulsory Medical Care and the Welfare State*. Dr. Thron stated that a book may be borrowed, free of charge, by members upon signature.

Dr. Thron urged the members to answer and return the questionnaire about Corporate Practice of Medicine.

Dr. Jehl was called upon to report on the Press Dinner held on January 12th. He stated that this dinner-meeting was held by the Public Relations Committee and officers of the Society with representatives of the local daily newspapers in Paterson and Passaic. The purpose was to improve relations with the press and to discuss differences of opinion. He further said it was suggested by the press that we help with newspaper articles by reporting anything a member believes is not ethical. Dr. Thron suggested that once a year the Society buy a page in the newspaper and publish all the names of the members of the Society.

The meeting was then turned over to Dr. Frank R. Schell who introduced the speaker, Charles L. Dunham, M.D., Deputy Director, Division of Biology and Medicine, United States Atomic Energy Commission, Washington, D.C. Dr. Dunham spoke on "Medicine in the Atomic Age."

DAVID B. LEVINE, M.D.
Reporter

Salem

Since our regular speaker, Dr. Templeton, was not able to appear because of illness, the February 18 meeting of the *Salem County Medical Society* was devoted to a discussion of business matters.

Meeting was called to order by President C. B. Norton at 4:45 p.m. Minutes of the last meeting were read and approved.

Dr. Harry Suter reported on the County Public Relations program; he read a letter which is proposed to send key groups through the county. A long discussion of the advisability of sending this questionnaire followed. Dr. J. Reinhard moved and Dr. August Jonas seconded that we approve of and send out the questionnaire as prepared by Dr. Suter, except that we add that there is available a County Greivance Committee. Approved.

Dr. Harold Mark moved that we present a positive program to the people. It was not seconded.

Dr. Reinhard moved that the groups to whom the questionnaire be sent be decided on by Dr. Suter's committee. Approved.

Application from the State Physicians Placement Service in regard to a Lower Penns Neck physician was read and the Society approved the filling out of the form.

Dr. Isadore Lipkin read a report on the County

Diabetic Survey. 3327 tests were done and 29 new cases of diabetes were detected.

Drs. Lee Hummel, C. B. Mackes, A. Jonas and J. R. Cox were asked to investigate county fee schedules for office and house calls.

It was moved and seconded that the Society attempt to enroll 51 per cent of its members in Hospital Service Plan of New Jersey.

Dr. C. B. Norton announced that formal resolutions to be introduced to the State Society are being accepted.

Dr. Norton asked the reporter to prepare a summary of the County Society's year's activities for submission to the State JOURNAL.

Dr. Norton asked Drs. H. B. Libien, E. Pashuk and H. Mark to form a committee for drafting a revision of our constitution. The suggested changes are to be mimeographed for discussion at our next meeting.

Dr. Hummel was asked to establish a protocol for handling grievances.

Drs. E. Pashuk, W. Staub, F. W. Whites and H. Fullerton are to make arrangements for the Shad Dinner.

Dr. Suter moved that Drs. John Madara and Harry Fullerton, as immediate past presidents, be appointed to the Executive Committee. Approved.

Meeting adjourned to supper at 5:50 p.m.

CHARLES E. GILPATRICK, M.D.

Reporter

Somerset

A regular meeting of the *Somerset County Medical Society* was held February 10 at the Somerset Hospital. Dr. Alan J. Stolow presided in the absence of the president.

The Somerset County Tuberculosis and Health Association submitted their annual report. The Society gave its approval to the program, as outlined in the report, for the coming year.

Speaker of the evening was Dr. A. Kupferberg, Director of Microbiology, Ortho Pharmaceutical Corp., whose topic was "Infections of the Female Genital Tract." His talk was enjoyed by all and a discussion period followed.

The meeting was adjourned at 9:45 p.m. and refreshments followed.

The regular monthly meeting of the *Somerset County Medical Society* was held on March 10 with Dr. M. E. Tolomeo, President, presiding.

Dr. Marcus E. Sanford reported on the meeting of the Welfare Committee in Trenton. The President of The Medical Society of New Jersey had requested that each county society give approval to the proposed administration of the Salk vaccine, providing the results of the study of its effectiveness are favorable. Such a motion was adopted by the Society.

Dr. Irving Klompus gave a report of the fee schedule committee. After some discussion, the following suggested minimum fee schedule was adopted: first office visit $5, subsequent visits $4.

The speaker for the evening was Dr. Horace Bell from the Essex County Isolation Hospital. His subject was "Infections of the Nervous System." He gave a very informative and enjoyable lecture.

C. S. McKINLEY, M.D.

Reporter

Union

The regular meeting of the *Union County Medical Society* was held on March 9 at the White Laboratories in Kenilworth.

The scientific portion of the evening consisted of the presentation of a film "The Clinical Manifestations and Treatment of Gout," which was taken at the Lahey Clinic in Boston.

It was voted to bring to the attention of The Medical Society of New Jersey, a resolution concerning the removal of Muhlenberg Hospital from the list of accredited hospitals.

The following were elected to membership in the Society: Drs. Bruce Dorman, Plainfield; Bernard Ehrenberg, Hillside; Yvonne Imbleau, Union; and by transfer, Drs. George Erdman of Summit, from Essex County, and Herbert Langer of Cranford, from Kings County, N. Y.

The meeting adjourned with a collation.

MERTON L. GRISWOLD, JR., M.D.

Reporter

American College of Surgeons — N. J.

At the annual meeting of the New Jersey Chapter of the *American College of Surgeons* on March 26, 1955 at Saint Joseph's Hospital, Paterson, the following were elected.

President: Dr. Philip Kunderman, New Brunswick; Vice-President: Dr. James Spencer, Newton; Secretary: Dr. Benjamin Daversa, Spring Lake; Treasurer: Dr. J. Harold MacArt, South Orange.

Councilors, 1956 — Dr. Guy Laudig, Morris Plains; Dr. George W. Waters, Jersey City; Dr. Marshall Smith, New Brunswick.

1957 — Dr. Ralph J. Belford, Princeton; Dr. Robert Bowen, Camden; Dr. W. Kenneth Wheeler, Newark.

1958—Dr. Paul Mecray, Jr., Camden; Dr. Eugene V. Parsonnet, Newark; Dr. Spencer T. Snedecor, Hackensack.

BENJAMIN DAVERSA, M.D.

Reporter

Woman's Auxiliary • • •

Meet Madame President

There has been much talk lately about improving relations between physicians and attorneys. New Jersey is doing its share. The new President of the Woman's Auxiliary is an attorney. The Auxiliary has had school teachers and nurses, secretaries and housewives, but never before a Madame President who could tell a tort from a contract.

Cora Ruoff was born in Vermont, but soon thought better of it and, at age 5, moved to New Jersey. She went to the public schools in Union City, N. J., and in 1917 she married Dr. Andrew Ruoff. In 1924, having already served as mother of two children, housewife, and general factotum in the Ruoff residence, she became bored with such comparative idleness and went to the Law School of Rutgers University. Dr. Ruoff went along, too, but Cora was the one who was admitted to the New Jersey bar.

She became involved in Church activities (she was president of the Ladies Aid Society of the Palisade U. P. Church), the Citizens Committee for the Public Health Nursing Service, the local chapter of the Cancer Society (on the Board of Managers, in fact), and the Hudson County Tuberculosis League. Mrs. Ruoff was one of the founders of the Auxiliary to the Hudson County Medical Society. Needless to say, she was also President of that Auxiliary. In 1943 she was invited to become Parliamentarian of the Woman's Auxiliary to The Medical Society of New Jersey, and has been working for that Auxiliary in one capacity or another ever since. She has been on the Board of Directors, has served as Conference Chairman, has chaired numerous committees and gone through all the presidential offices.

MRS. ANDREW C. RUOFF, SR.

Dr. and Mrs. Ruoff have two sons and four grandchildren. One son is a field director with the American Red Cross way down east (in Maine). The other is an orthopedic surgeon in Pompton Plains.

Auxiliary Report • • •

Essex

Mrs. Philip R. D'Ambola, president of the *Woman's Auxiliary to the Essex County Medical Society*, presided at an Executive Board meeting on January 17, and at a regular monthly meeting which was attended by 41 members at 369 Park Avenue, Orange, on January 24. The committe to study loans and nurse scholarships reported the result of their meeting on January 11. The decision was to leave our nurse scholarship fund as it is instead of establishing a nurse loan fund.

Following the meeting, Mrs. Harry E. DiGiacomo, Program chairman, introduced Detectives Vitale and D'Ambola of the Narcotics Bureau. Mr. Benjamin Vitale spoke on "The Evils of Narcotics and Its Effect on Juveniles."

February 9, fifteen Auxiliary members acted as

hostesses to 1100 doctors at the "Videclinic" held at the Essex House in Newark.

Our president, Mrs. D'Ambola, representing the Auxiliary, made a one-minute recording which will be heard on radio during March to aid in the sale of government bonds.

On February 11, the Woman's Auxiliary sponsored a Luncheon-Fashion Show for the benefit of the A.M.E.F. This was at 369 Park Avenue, Orange, and was attended by 325 women. Mrs. Thomas A. Santoro was chairman and co-chairmen were Mrs. Edwin Albano and Mrs. Frank Bellucci. Mrs. Oswald R. Carlander, State A.M.E.F. chairman, spoke on the origin and purpose of the A.M.E.F. Invited guests were Mrs. Paul E. Rauschenbach, president of the Woman's Auxiliary to The Medical Society of New Jersey; Mrs. Andrew C. Ruoff, Sr., president-elect; Mrs. Frank S. Forte, wife of the president of the Essex County Medical Society. Decorations for the party followed the Valentine's Day theme, "Open Your Heart To The A.M.E.F." The fashion show was presented by LaLouise of Irvington. Mrs. Robert Citrino was chairman of that committee. Other committees were: Decorations—Mrs. Anthony D'Addario and Mrs. Frank Bellucci and Mrs. Edwin Seifert; Reservations—Mrs. William DiGiacomo and Mrs. Charles Calasibetta; Printing—Mrs. Lucien Della Fera; Favors—Mrs. Louis Covino; Floaters—Mrs. George Parell and Mrs. Samuel J. Pecora; Publicity—Mrs. Thomas A. Messina.

A donation to the Essex County Service for the Chronically Ill of $1,000 was one of the recommendations made at the regular monthly meeting of the *Woman's Auxiliary to the Essex County Medical Society* on February 28 at 369 Park Avenue, Orange. The President, Mrs. Philip R. D'Ambola, presided. This donation will supplement the revolving fund for the payment of Homemakers salaries of the Chronic Ill Service. Mrs. Albert B. Tucker, Auxiliary chairman of the Chronic Ill Committee, gave a detailed report and explained the need of the Service for the donation since the payroll for Homemakers increased from $5,000 in 1952 to $32,000 in 1954. The increased use of the Homemakers Service is due to the addition of a Medical Social Worker, and the new Preventive Program which allows assistance to short term illness patients—the post partum, postoperative and medical convalescents. As in the past, the Homemaker salary is $1.25 per hour, and it costs the Chronic Ill Service an additional 55 cents per hour to maintain the Homemakers Service. Since this Service was conceived under the auspices of the Essex County Medical Society, we are pleased to include it as an important project of the Woman's Auxiliary.

At this meeting recommendation was also made to contribute $25 to the Cancer Society.

Mrs. Edward P. Duffy, Jr., Nurse Recruitment chairman, recommended that her committee be empowered to answer and take care of letters from Essex County girls who write for information to the State Board of Nursing. She also moved that a new pamphlet be sent to the 27 guidance directors in Essex County and the Auxiliary pay the cost of 25 cents per pamphlet.

A.M.E.F. chairman, Mrs. Thomas A. Santoro, reported that a total profit of $357.77 was realized from the Luncheon-Fashion Show held on February 11 at 369 Park Avenue, Orange. Also, two donations of five dollars each for memorial cards were made to the A.M.E.F.

A grand total of $3,520.87 from the Annual Chrysanthemum Ball held on November 20, 1954, was announced by Ways and Means chairman, Mrs. George C. Parell.

Tea was served after the meeting. The highlight of the afternoon, however, was the cookie contest arranged by our Program chairman, Mrs. Harry E. DiGiacomo. The participants, who entered their own home-baked cookies, were presented attractive corsages of blue and gold paper and ribbons made by Mrs. DiGiacomo and Mrs. Paul Aszody. The judges, who were Mrs. Thomas Hyland of Harrison, a dietician; Miss Bernice Garrigus of the Public Service "Homemakers' Department;" Miss Catherine Cahalin, Red Cross Nutritionist of Orange, selected the following winners:

First Prize—Mrs. Paul Aszody
Second Prize—Mrs. Frank Bellucci
Third Prize—Mrs. Anthony D'Addario

Blue Ribbon Awards were presented to Mrs. Matthew Marano, Mrs. A. B. Cucinella, Mrs. George Maggio, Mrs. Anthony Giannotto and Mrs. Thomas A. Messina.

Proceeds from the sale of the cookies amounted to approximately $41, and this sum was donated to the A.M.E.F.

The next regular monthly meeting of the Auxiliary will be held on March 28 at 369 Park Avenue, Orange. An artistic and entertaining program has been planned with Paul F. Steffen, musicologist, teacher, and entertainer for over 25 years. He will feature audience participation, playing the Swiss Hand Bell and singing in the Bell Choir. We expect many members to attend this unusual musical program.

Book Reviews • • •

Many of the reviews in this section are prepared in cooperation with the Academy of Medicine of New Jersey.

Public Relations in Medical Practice. By James E. Bryan. Pp. 301. Baltimore. Williams and Wilkins 1955. ($5.00)

Jim Bryan was, for three years, the Executive Officer of this Society. We have, therefore, a sort of family interest in this book. Nevertheless, we think that we are judging it here objectively. First, let it be said that this is a unique book. No one else has written a text on public relations in medical practice, and any one who writes one hereafter will have to trace the development of the subject back to this pioneer work.

In the second place, only a non-physician could have written this. We doctors are too close to the subject to see it objectively. We take many things for granted and it is healthy for us to see what some of our practices look like through the eyes of a friendly nonmedical observer. And in the third place this book delivers fresh ideas the way a Roman candle delivers sparks. By "fresh" ideas, we don't mean that these are always Jim Bryan's original thoughts. He would be the first to deny any such credit. Much of the material is drawn from the writings and speeches of others. Some of it is uniquely original with Jim Bryan. Which is which is not very important, since the author has done us all a service by collating these thoughts and arranging them for ready reference. Furthermore he has posed new lights and shadows on old ideas, so that for all practical purposes, the text must be considered original, even when he quotes some one else *in extenso*.

The book reviews the doctor's relations with his staff, his patients, his medical society, the insurance companies, the hospitals, and civic organizations. There is a frank discussion of fees, of publicity-methods, of prepaid medical care and of living with oneself. Mr. Bryan has the knack of delivering odd bits of wisdom without seeming to preach. He has a way of saying things which makes the doctor almost think that he (the reader) had the idea all along—of course—and that the author was only the accoucheur.

As we say, the book is chock-full of ideas. For instance, did you ever think of yourself as a *host* to your patients? Think of your reception room that way for a moment and see the train of thought it starts. Did you ever think of the need for preserving the patient's sense of dignity against the indignities of illness? Did it ever occur to you that the doctor is blamed for hospital mismanagement although he has no control of it—and that the patient doesn't realize how little the physician has to say about hospital operations? Do you know how a patients reacts, (a) when you stubbornly refuse to reduce a bill, or (b) when you cheerfully agree to? Do you know any "hit and run specialists"? Has it occurred to you that a medical practitioner seldom pulls up stakes and moves out of the community—and that this has all sorts of implications?

These comments come from our dipping into the book at random to select material for this review. We didn't once find a sterile page. Now that the book is out, the need for it is obvious. Why didn't sone one think of a book like this before? No one did, so here it is for the first time: a useful, a readable, a challenging and sometimes an inspirational work.

HENRY A. DAVIDSON, M.D.

Reproductive System. The Ciba Collection of Medical Illustrations, volume 2. Prepared by Frank H. Netter, M.D. Edited by Ernst Oppenheimer, M.D. Pp. 286. Summit, N. J., Ciba Pharmaceutical Products, Inc., 1954. ($13.00)

Dr. Netter is the only physician in this country who has taken up "medical illustration" as a full time specialty. He has the rare gift of combining astute, artistic talents with a thorough knowledge of the anatomy. This results in the most beautifully colored illustrations that can be found anywhere in the American literature. He thus fills a gap which has long been felt by physicians throughout when they compared the average illustrations in American textbooks with those which have appeared in some foreign countries.

One section of this book deals with the anatomy, physiology, and pathology of the male genital tract. The pictures are of unusual quality and in dealing with the pathologic processes, some urologic aspects are taken into consideration. In describing the different types of urethritis, it would have been desirable to include the infection of the male urethra by fungi, such as Candida albicans, which is today considered as a definite pathologic entity.

Most of the book is devoted to the female genital tract. The anatomic tables excel by their clarity and accuracy. The chapter on vaginal cytology is probably over-simplified. It would have been desirable to devote a little more space to the embryology. Diagnostic procedures used in gynecology as well as in the investigation of female sterility are well covered. There is an excellent chapter describing the different sites of endometriosis. The portion that deals with the tumors of the ovary is very well written and correlates the histopatho-

logic with the clinical findings in a masterly fashion.

Excellent illustrations depict obstetrical pathology and show the diseases of the newborn. The last chapter describes the anatomy and pathology of the breast and methods of differential diagnosis between benign and malignant tumors.

This volume should be in the hands of every physician who treats gynecologic disorders, or practices obstetrics. It will afford him a welath of instructive material for his own education. Another value lies in the possibility of giving the patient visual understanding of her ailment thus saving the practitioner a great deal of time and effort in explaining many of the aspects of women's diseases. The book is warmly recommended.

WERNER STEINBERG, M.D.

Toxicity of Industrial Organic Solvents. By Ethel Browning, M.D. Pp. 411, New York, Chemical Publishing Company, Inc., 1953. ($8.00)

Industrial toxicology is an increasingly complex branch of medicine. The growing use of organic chemicals in every branch of manufacturing exposes industrial workers to many little known substances. The author has rendered a significant service in compiling this reference manual. Her work was sponsored by the Medical Research Council of Great Britain.

Organic industrial chemicals are grouped according to their chemical structures. Each solvent is given a chemical description. There follows a list of its industrial uses. Methods for detecting the solvent in the air, blood and tissues are described. There is a description of the effects on animals and humans and an outline of treatment and differential diagnosis. The book is so organized that it is easy to find information concerning the toxicity of each chemical described.

This reference book is of chief value to the industrial physician and toxicologist. It will have little appeal to the practitioner of general medicine.

ROWLAND D. GOODMAN, M.D.

Manual of Proctology. By Emil Granet, M.D. Pp. 346. Chicago, Year Book Publishers, Inc., 1954. ($7.50)

This little book packs into it a great deal of information about proctology. This author knows the subject well. The volume starts with anatomy, symptomatology, anesthesia and general therapy. Innovations are a concise discussion of pediatric proctology and a timely discussion of antibiotic colitis. Dr. Granet's treatment of the important subject of hemorrhoids is clear and concise, and is of considerable help to any general practitioner wanting to treat, in his own office, patients with this condition.

The book is freely illustrated. This is always a help. Proctology at last really has come into its own. From the gastro-enterologist's point of view, proctology is a very important subject. It is often neglected in the "work up" of a new patient. Since almost 80 per cent of all lesions of the colon are within reach of the sigmoidoscope, it seems criminal to neglect this office procedure. This book is highly recommended, not to proctologists and gastro-enterologists alone, but to anyone who does a complete physical examination of his patient.

ANDREW J. V. KLEIN, M.D.

Ciba Foundation Symposium on Hypertension, Humoral and Neurogenic Factors. Edited by G. E. W. Wolstenholme, O.B.E., M.A., B.Ch. and Margaret P. Cameron, M.A., A.B.L.S., assisted by Joan Etherington. Pp. 294. Boston, Little, Brown and Co., 1954. ($6.75)

This excellent little volume is an absolute must for anyone who is interested in the pathologic and applied physiology of hypertension. The names of the men who have taken part in the symposium which is reported in this volume are, without doubt, the Who's Who of research workers in the field of hypertension. Those workers who were present to take part certainly had their work well reviewed. The discussions at the end of each of the papers are pertinent and cryptic, as well as most valuable for an analysis of the problems and the thinking of the men who are most interested in this field from the physiologic point of view. For those who would like to have a volume with a quick review of methods of treatment and diet lists and ideas on how to handle the hypertensive patient in the office, this is certainly not the book of choice. This is not the purpose of the volume, nor is any attempt made to fulfill such a need, even though some of the papers do discuss some of the latest ideas in therapy, especially from the surgical point of view.

However, this volume will be one that every thoughtful internist will want to have on the shelf. Certainly the practicing cardiologist who is interested in the basic physiologic problems which truly confront him in the treatment of hypertension, especially in view of the many new drugs and ideas which are currently so rapidly being presented will want to have this volume so that he can refer to it for a rational application of the physiologic principles expressed by many of the workers in the field to the use of some of these newer drugs and see whether he truly wants to subject his patients to such therapy under the circumstances.

Dr. G. W. Pickering summarized the purpose of this symposium by stating, ". . . this problem of hypertension provides a challenge to clinicians, biochemists, pharmacologists and physiologists and I take it that it is our purpose here and now to try and accept that challenge to pool our ideas and knowledge and see how far we can get." This was admirably done. However, I am afraid that in spite of the pooled knowledge of so many brilliant minds we did not get very far even yet.

ARTHUR BERNSTEIN, M.D.

TUBERCULOSIS *Abstracts*

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Periodic Examinations

By H. Corwin Hinshaw, M.D., Bulletin, National Tuberculosis Association, January, 1955

The purpose of periodic examinations of persons in apparent good health is identical with that of other medical examinations: to detect disease in its earliest phases of development and to counsel persons in matters of health preservation.

Who should be examined? The more important a person is to society, to relatives and dependents or to business associates, the more important his health becomes. Key men in business, mothers of children, heads of families and those with other important missions to perform must conserve their productive capacity. Disability from preventable illness constitutes a serious threat to successful attainment of goals in life.

Many corporations regard the health of their executives as valuable assets to be conserved. Often they require executives to undergo periodic examinations at intervals of from six to twelve months, the expense being borne by the corporation. Labor unions look to the welfare of their members but few have come to recognize the need for examinations of the type advocated here. Physicians, who bear grave responsibilities to many people, are notably negligent of their own health, often because they fear to impose upon busy colleagues.

Persons with a history of chronic or recurring ailments, notably diabetes, tuberculosis, hypertension, duodenal ulcer, and other conditions have learned by experience that medical care is part of personal maintenance.

Examination Techniques

Many physicians have learned that the examination of persons who believe themselves to be well is no simple task. The skill and judgment required is at least equal to that needed for the care of the sick. The procedure of conducting an examination should be similar to that ordinarily employed when the subject is known to be ill.

A thorough medical history, interpreted by a physician with a broad knowledge of internal medicine, may yield clues to health hazards not previously recognized. A careful record of past ailments is secured, with emphasis upon conditions which tend to persist or recur. Often the past medical history must be supplemented later with clinical and laboratory records, x-ray films and the findings and opinions of previous physicians. The patient's recollections and his current opinions concerning previous illness may be faulty.

If the patient has noted any abnormality of function or volunteers any symptom, or if he expresses any special fear of disease, these are recorded in detail. Finally, specific questions are asked with respect to each organ system. The end result is a complete and orderly inventory of the functional status of all parts of the body insofar as these have appeared to the patient.

The physician should probe into the emotional problems and occupational strains which may relate to health and happiness. It is important to record habits of eating, sleeping, and recreation, as well as the nature and intensity of physical and mental effort expended in occupational pursuits.

The consumption of alcohol, tobacco, sedatives, and self-prescribed medications should be estimated in quantitative terms. Often it is wise to inquire directly concerning sexual habits and marital problems. Many persons who would never open such topics of conversation are eager to share their problems with an understanding physician and are benefited by doing so.

The physician should know his patient's ambitions, accomplishments, and plans for the future as well as his frustrations and failures. The physician, like the minister and the lawyer, is often in a position to assist the patient in analyzing his life program.

Physical examination of the apparently well person must be fully as meticulous and complete as in the case of the ailing person. Minor deviations from normality are evaluated as possible incipient disease. All accessible structures are observed closely and examined with seeing hands. The actions of the heart and lungs are determined by traditional methods of physical examination. If blood pressure is elevated it is determined repeatedly until a base level is recorded. The body orifices, including the ocular fundus, the nasal and oral cavities, the rectum and vagina are examined visually and probed with examining fingers or instruments.

Laboratory and x-ray studies will be planned after the medical history and physical examination have been completed. Each test will be chosen to answer a specific question, often a question which arose as a result of the interview or examination. In addition to the special tests certain routine examinations are necessary. An x-ray examination of the lungs and heart is essential to all cases. Blood counts and urine analysis also may reveal conditions not producing symptoms or findings. Very few cases are found by the routine serologic test for syphilitic infection but it has become traditional. Electrocardiograms are indicated if the patient is over the age of forty-five years. Even a normal tracing may become valuable for purposes of comparison if cardiac disease appears later.

The success of some community-wide antituberculosis x-ray screening programs has suggested that tests to detect other diseases should be devised and applied to large population groups. Many physicians and public health experts are opposed to such multiphasic screening programs except as research projects. The reasons for such opposition are obvious if comparisons are made between the requirements of a thorough examination and those of a series of simple laboratory tests. An easy and inexpensive way to make everybody healthy has not been found.

The National Tuberculosis Association and its affiliated health organizations can do much to popularize good and thorough periodic medical examinations. The problem is largely one of health education and medical economics. People have already learned that periodic dental examinations are wise and economical. Parents have already learned to consult pediatricians for advice and care of well children. When private pediatricians cannot be had, well baby clinics are provided. Why not well papa and well mama clinics?

The actual cost of periodic health examinations by private physicians is not beyond the reach of the average working man. Maintenance of a man cost less than maintenance of an automobile. The cost of trading the serviceable old car for a new model is greater than the cost of a major illness. The cost of maintaining a good sickness insurance policy is less than the cost of smoking a package of cigarettes daily. Women spend more in beauty parlors than in doctors' offices. Many families who spend hundreds of dollars annually on luxuries and vices are considered to be "medically indigent." Values and standards are distorted through ignorance and improvidence.

Readers of popular magazines learn much about modern medicine, much that is true and some that is half true. Our elementary and secondary schools should now have organized courses in medical science, teaching anatomy, physiology and pathology. Such knowledge in the next generation would lead to better appreciation of health and good medical care. Money now spent on nostrums and quacks would be devoted to the purchase of adequate preventive and curative medical care.

The voluntary health organizations are the most potent factors in health education in America today. Their support should be directed toward securing the best medical care for well people as well as for persons who are ill.

1. Bárány Pointing Test. *The patient points at a stationary object, first with his eyes open and then closed. A constant error in pointing (past pointing) with his eyes closed in the presence of vertigo indicates peripheral labyrinthine disease or an intracranial lesion.*

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3. The Rotation (swivel chair) Test. *The patient sits in a swivel chair with his eyes closed and his head on a level plane. The chair is turned through ten complete revolutions in twenty seconds. Stimulation of a normal labyrinth will cause nystagmus, past pointing of the arms and subjective vertigo.*

Notes on the Diagnosis and Management of "Dizziness"

I. Vertigo

The term "dizziness" (vertigo) should be restricted to the sensation of whirling or a sense of motion.[1] This sensation is usually of organic origin and is the tangible symptom of a specific pathology.

Moderate vertigo, with a sense of motion and a whirling sensation, may be produced by infection, trauma or allergy of the external or middle ear. Examination of the ear will usually disclose the abnormality.

Severe vertigo, which will not permit the patient to stand and causes nausea and vomiting, indicates an irritation or destruction of the labyrinth. The specific condition may be labyrinthine hydrops, an acute toxic infection, hemorrhage or venospasm of the labyrinth or a fracture of the labyrinth. Multiple sclerosis and pathology of the brain stem should be considered also.

It is important to learn if the patient's sensation is continuous or paroxysmal.[2] Paroxysmal vertigo suggests specific conditions: Ménière's syndrome, cardiac disease and epilepsy. Continuous vertigo without a pattern may be due to severe anemia, posterior fossa tumor or eye muscle imbalance.

Dramamine® has been found invaluable in many of these conditions. In mild or moderate vertigo it often allows the patient to remain ambulatory. A most satisfactory treatment regimen for severe "dizziness" is bedrest, mild sedation and the regular administration of Dramamine.

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1. Swartout, R., III, and Gunther, K.: "Dizziness:" Vertigo and Syncope, GP *8*:35 (Nov.) 1953.

2. DeWeese, D. D.: Symposium: Medical Management of Dizziness: The Importance of Accurate Diagnosis, Tr. Am. Acad. Ophth. *58*:694 (Sept.-Oct.) 1954.

SEARLE

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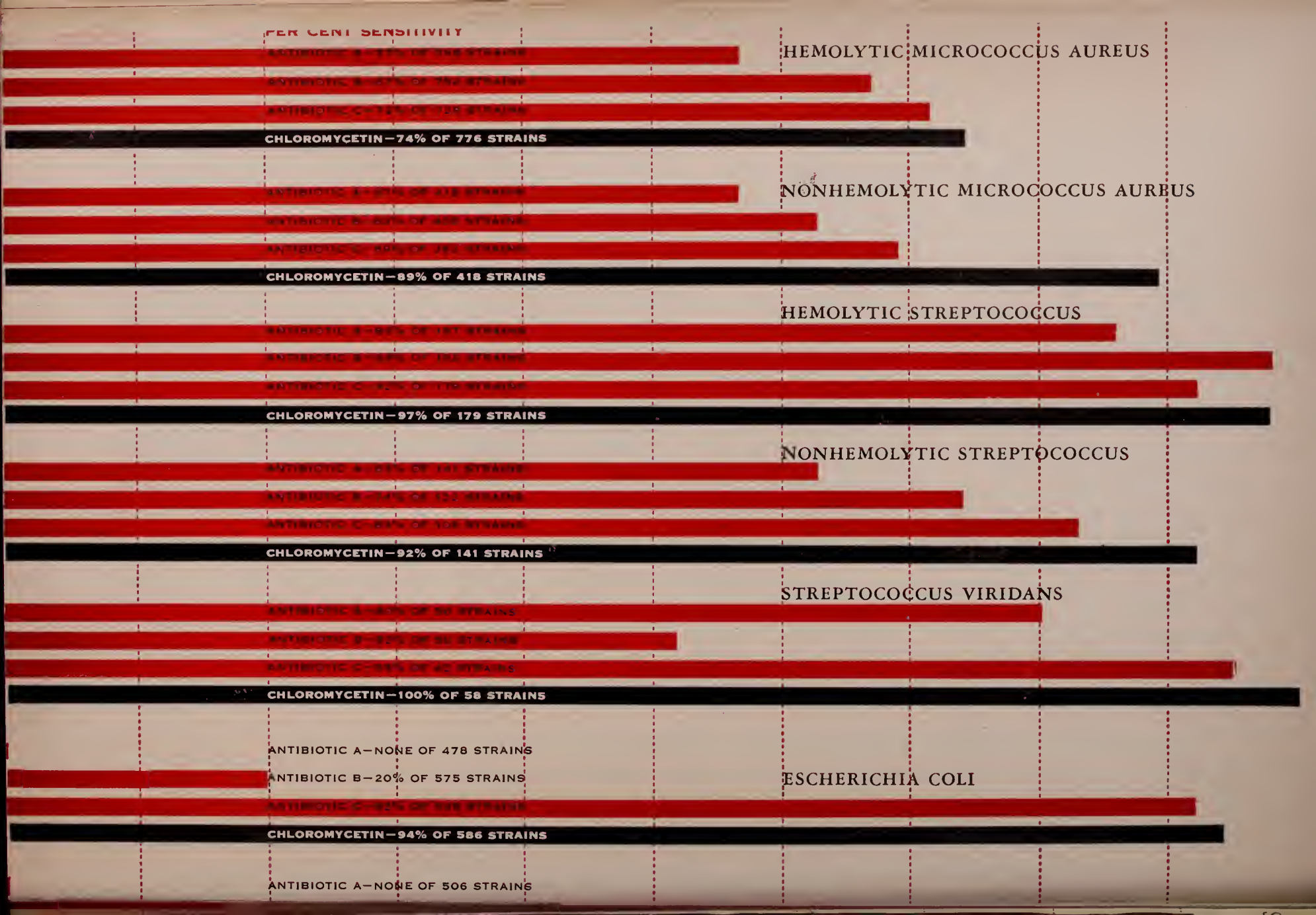
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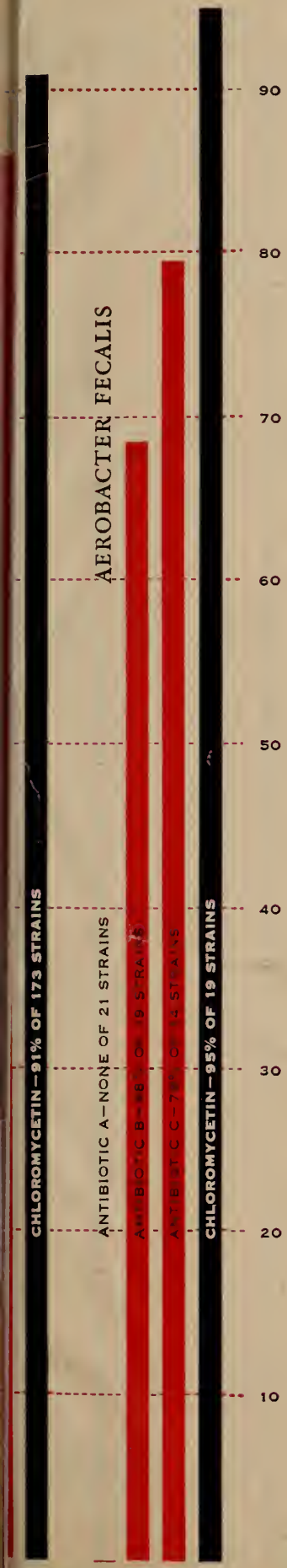

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(1) Butler, A. M., and Wolman, I. J.: Quart. Rev. Pediat. 9: 63, 1954. (2) Moore, I. H.: Journal-Lancet 74: 80, 1954. (3) Collins-Williams, C.: J. Pediat. 45: 337, 1954. (4) Clein, N. W.: Ann. Allergy 9: 195, 1951.

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OF

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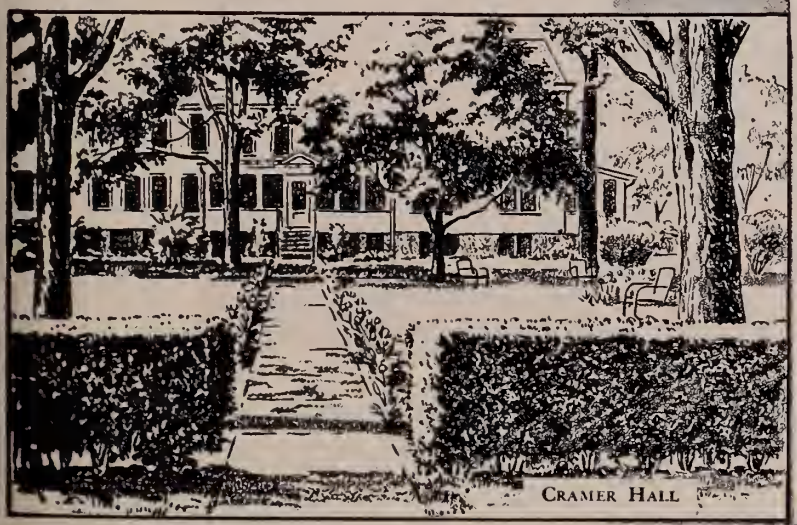

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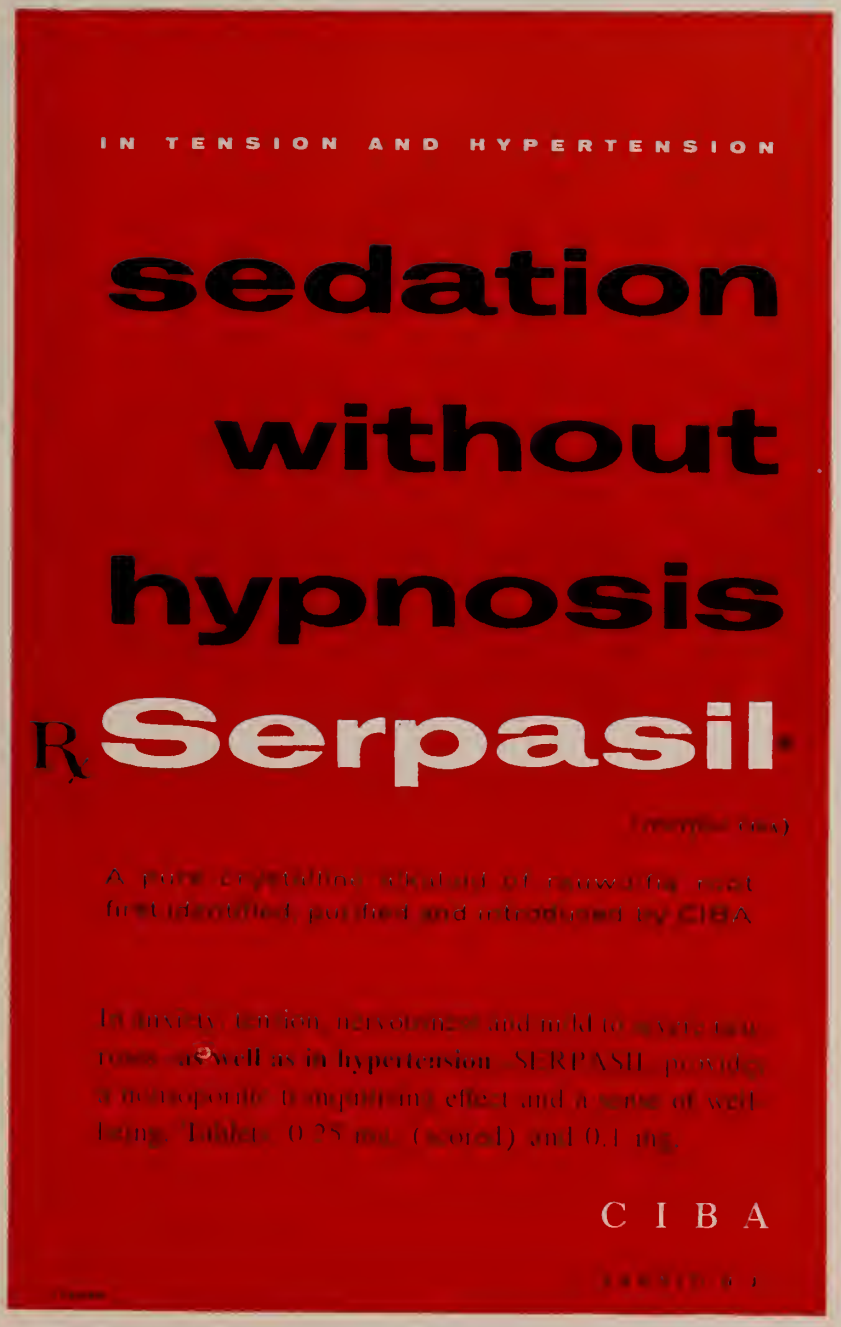

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(1) Payne, R. W.; Shetlor, M. R.; Farr, C. H.; Hellbaum, A. A., and Ishmael, W. K.: J. Lab. & Clin. Med. 45:331, 1955. (2) Bunim, J. J.; Williams, R. R., and Black, R. L.: J. Chron. Dis. 1:168, 1955. (3) Holbrook, W. P.: M. Clin. North America 39:405, 1955.

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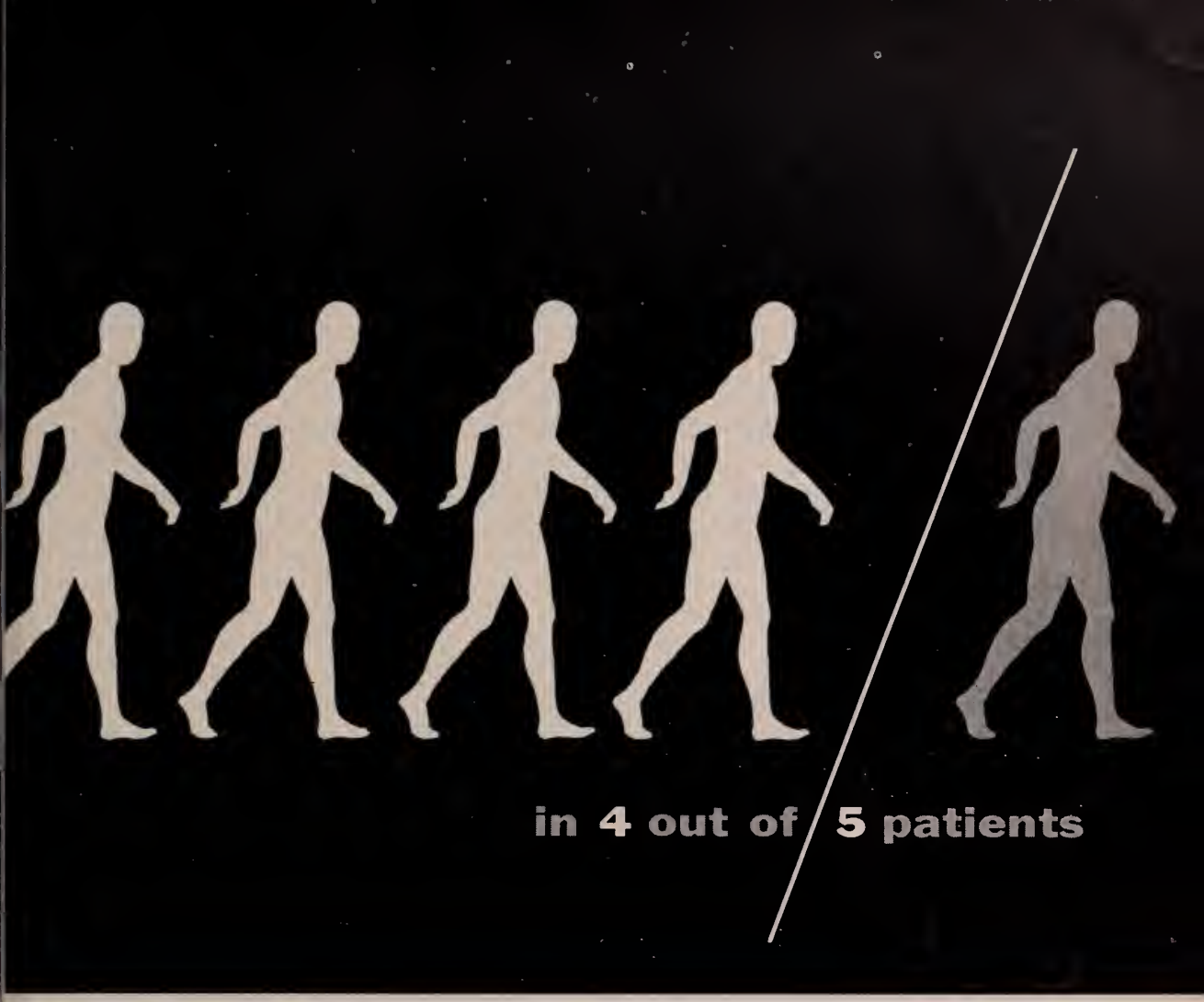

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References:
1. Winsor, T., Humphreys, P.: Angiology *3*:1 (Feb.) 1952.
2. Plotz, M.: N. Y. State J. Med. *52*:2012 (Aug. 15) 1952.
3. Dailheu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.
4. Russek, H. I., *et al.*: Am. J. M. Sc. *229*:46 (Jan.) 1955.

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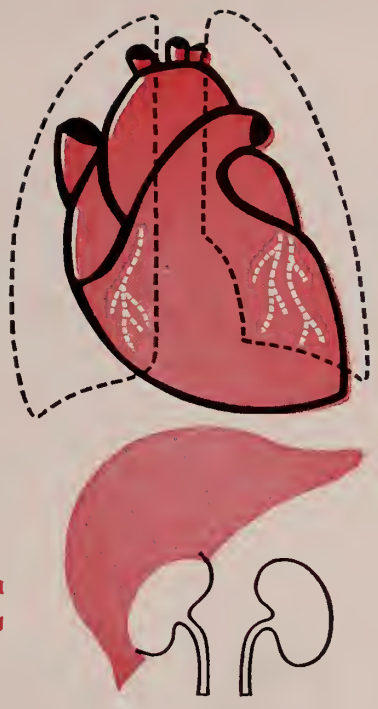

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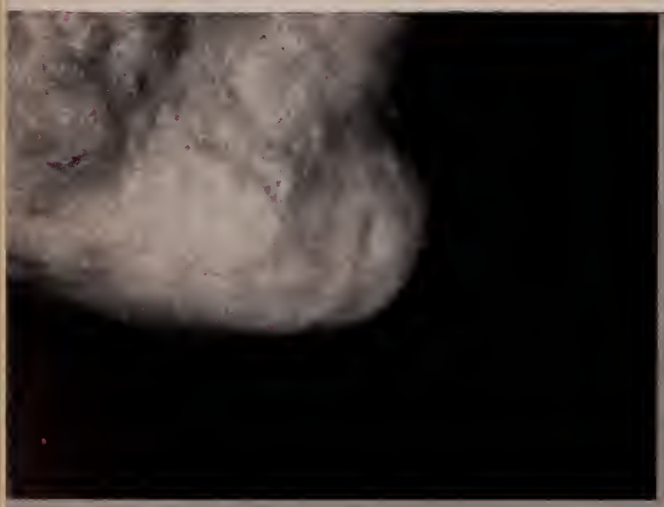

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Editorials • • •

The Medical Rat Race

Only a few decades ago, doctors swore that Fowler's solution was specific for chorea and colchicum was a sovereign remedy for gout. They used to remove gall stones and leave the gall bladder in. Apparently in medicine you have to unlearn as fast as you learn. Nearly every medical maxim is subject to change without notice. The pace is so fast today that if you spent just one year away from medicine, you'd miss many significant changes. On your return you'd be writing prescriptions for remedies that even the pharmacists would consider old-fashioned, and you'd be ignorant of several brand new developments.

To keep up with the dizzy tempo of medical change would really require the doctor's full time. It would take weeks to understand the mode of action of antibiotics and more weeks to know what ACTH was all about. Since he has to practice too, the physician must work out some method of keeping up with medicine without throwing his patients out of the reception room.

In the February 26 (1955) *Journal of the American Medical Association*, Dr. D. G. Vollan reports on a survey of the physicians' graduate educational technics. He points out that there are five fields for learning: professional contacts, hospital staff meetings, formal graduate courses, medical society meetings, and the primer maker of full men, reading. The doctor puts in anywhere from 15 to 22 per cent of his total professional time on learning. But no physician thinks that this is enough.

Some practitioners have to depend on the detail men to keep them up to date. The detail men have a pitch which is compact, very practical and goes down as smoothly as maple syrup. But no M.D. really thinks that that is the way to keep up to date.

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Of course many medical articles are repetitious, many fail to deliver any new ideas, and some are misleading. The trouble is that it takes time even to screen them out. If a doctor has hospital affiliations, he has two or more institutions insisting that he go to monthly staff meetings, plus monthly service meetings, and there sometimes is a real "papa spank" sanction behind the plea. The medical society, the academy, possibly a specialty society also clamor for his time. The medical journals may remain in their wrappers in virginal intactness, for who has time to read journals when so many live societies (and now television instruction) demand the doctor's time? (What *are* you doing reading this item when you ought to be improving your mind at a meeting, conference, seminar, colloquim, or vide-clinic?)

So the trend towards abstracts. The journals select the cream of the crop, so every articie is an abstract of a massive project. Then there is the summary or conclusion section at the end, an abstract of the abstract. Then there are periodical abstract services plus year books of various sorts which abstract the abstracts of the abstracts.

There ought to be a law. The doctor has to see patients and go to medical society meetings, read journals and read books, attend hospital staff meetings and take an occasional graduate course. He has to listen to detail men, read the wrappers around the samples, study the legends on the free blotters he gets, and fill out forms for Blue Cross, Blue Shield, Workmen's Compensation, Social Security, Veterans Administration, Internal Revenue, Sickness Indemnity Benefits, Life and Casualty Companies. If he doesn't study the books and journals he's an old stick-in-the-mud. If he doesn't fill out the forms he's non-cooperative. If he spends all his time seeing patients, filling out forms and keeping up with the literature, then he remains within the narrow walls of the medical rat race and never enjoys any hobbies, cultural reading, leisure time, music or other amenities. And you know what *that* makes him!

But let's not ask for pity. We probably love it this way.

Twilight of the Waiting Room

In his idea-packed book,* Jim Bryan suggests that the doctor never refer to his reception room as a "waiting room" and that he never allow any one else to use that term.

We think that the author is right. After all, a "waiting room" suggests something passive: the patient waits; he sits; he is forgotten. It conjures images of cold, poorly lighted rural railway stations. By contrast, a reception room suggests something active. Here something is done to and for the patient. He is received. To put it another way, he is welcomed. The phrase "reception room" has an aura of elegance about it.

As the idea of an "appointment" practice (for GPs as well as specialists) catches on, there will be less use for this room anyway. When it must remain, it could approximate the living room where your guest waits while your wife puts on those last and mysterious finishing touches. Maybe if we all thought of these spaces as "reception rooms," we'd begin to look at them with more critical eyes. The light, the heat, the decor, the reading matter, the spaciousness, the friendly arrangement of chairs—all this goes into good "reception." Whether as an actual room or only as a word, the "wating room" could well be retired from active duty. Let patients no longer just wait. By all means let them be received. Maybe we ought to go the whole way and call it a "welcome room."

*Bryan, James E.: Public Relations in Medical Practice. Baltimore 1955. Williams & Wilkins.

Original Articles • • •

JAY E. MISHLER, M.D.
LEONARD S. ELLENBOGEN, M.D.
Atlantic City

Management of Pituitary Tumors

Too often surgery is thought of as the only treatment for a brain tumor. Here Dr. Mishler and Dr. Ellenbogen describe the successful roentgenologic treatment of an eosinophilic pituitary adenoma.

PITUITARY tumors comprise about 10 per cent of all brain tumors. Most of these tumors are not malignant but by pressure on vital neighborhood structures and by alterations of pituitary hormonal production, they cause a great variety of symptoms and require prompt and thorough treatment. The most important of the pressure effects is that on the optic chiasm. This may vary in severity, from diminution in visual fields to blindness. Other pressure symptoms include headache, choked disc and atrophy of the sella turcica.

The glandular changes produced by pituitary tumors depend on the cellular structure. About 75 per cent of pituitary tumors are adenomas. Of these, about 76 per cent are composed of chromophobe cells, 23 per cent of acidophil and 2 per cent of basophilic cells.[1] The acidophil adenomas produce signs of hyperpituitarism and cause gigantism in the young. If onset is in adult life, they cause acromegaly. The basophilic adenoma causes increased production of adrenocorticotrophic hormone. By stimulating increased corticoid production, this causes adiposity, hypertension, diabetes, osteoporosis, and in the female, amenorrhea and hirsutism.[2] The chromophobe adenoma is composed of cells which produce no hormone but which, in addition to neighborhood pressure effects, compress the secreting cells of the gland and cause hypopituitarism with such symptoms as low blood pressure, low blood sugar and loss of secondary sexual characteristics. Both chromophobe and acidophil adenomas arise most commonly in adult life and have an equal sex incidence.

As a rule, the two earliest and most prominent symptoms are headache and failing vision. Therefore a large proportion of patients see the ophthalmologist first. For this reason, his responsibility in the early diagnosis of pituitary adenoma is great.[14] Headache is usually the first pressure symptom. The outstanding eye findings are pallor of the optic nerve heads and bitemporal cuts in the visual fields. In most patients with pituitary tumors, there is pallor of the optic discs at the first examination. Some however, appear normal for long periods.[15] Pallor does not necessarily indicate loss of nerve fiber function. After complete visual recovery, the nerve head may remain permanently pale. The pallor is due in part to ischemia. It may be accompanied by a shrinkage of the nerve substance termed atrophic excavation. Papilledema occurs in a few cases and is followed by secondary optic atrophy.

Visual field defects are the most important eye signs. They occur when the tumor presses upon the chiasma from below. The characteristic defect is bitemporal hemianopsia, which may involve the peripheral, central or paracentral fields. The typical field defect commences in the periphery of the supero-temporal quadrant, travels downward to produce the

characteristic temporal hemianopia and finally moves upward in the nasal field to produce complete blindness. At the same time, a paracentral scotoma usually appears in the superotemporal quadrant. Homonymous hemianopsia may occur if the tumor expands laterally out of the sella compressing the optic tract behind the chiasma; or affecting the optic radiation in the temporal lobe. One eye may be blind without the opposite eye being affected if the tumor expands anteriorly, affecting one optic nerve. Bilateral blindness may occur in large adenomas of long standing.[16] Increasing visual field defects are of value in indicating the growth of the tumor. Paracentral scotoma appears early if growth is rapid. Growth laterally may not always cause visual impairment.

The blurring or loss of vision may be gradual or sudden in onset. These symptoms may occur and clear rapidly as in "blind spells." These may be due to temporal field defects in one or both eyes. Ocular muscle palsies and unilateral exophthalmos may occur in late cases. Occasionally diplopia is noted and is due to incongruous field defects. Extremely rapid and lasting loss of vision is uncommon and may be due to hemorrhage within the tumor.[15] Signs of increased intracranial pressure are usually due to encroachment of the tumor upon the third ventricle.

Roentgen findings are of the greatest importance in the diagnosis of pituitary adenomas. The characteristic appearance in chromophobe adenoma is an enlarged sella turcica with a ballooned appearance, thin walls and thin decalcified posterior clinoids which are displaced upward and posteriorly. Acromegalics display similar changes and often also exhibit a dense and thickened calvarium, overdevelopment of the paranasal sinuses and prognathism. Examination of the hands in acromegalics often discloses widening of the ungual tufts. In basophilic adenoma, the sella turcica is usually not enlarged and osteoporosis of the skull and other bones is frequently found. There may be multiple vertebral compression fractures as a result of the osteoporosis.[2]

The size of the sella turcica has been the subject of much investigation. Cushing[3] in 1912 noted that profile radiographic measurements exceeding 15 millimeters in antero-posterior diameter and 10 millimeters in depth indicated enlargement of the sella. He considered the normal average measurements to be 10 to 12 millimeters antero-posterior diameter and 8 millimeters in depth. Kornblum's figures[4] for normal measurements are similar. Pancoast and Pendergrass[5] state that any sella turcica in which the antero-posterior diameter exceeds 12 millimeters and in which the depth exceeds 10 millimeters is enlarged. Heublein[6] found the average antero-posterior diameter of chromophobe tumors to be 23 millimeters and the average depth to be 17. Hare and his coworkers[7] have attempted to make profile radiographic measurements more accurate by a study of the lateral plane area of the sella turcica in relation to the age of the patient. For the adult, they find 135 square millimeters to be the upper limit of normal.

The modern management of pituitary adenomas requires cooperation between the family physician, the ophthalmologist, the radiologist and the neurosurgeon. X-ray therapy is the treatment of choice for all types of pituitary adenomas.[2] As early as 1912, Cushing[3] noted the good effects of radiation. He stressed the visual field determinations as a guide to its effectiveness. He stated[3]: "Certain observations, notably those of Gramegna, Beclere and Jangeas, scanty though they are, nevertheless show that in certain forms of hypophyseal tumor, prolonged roentgenization has a notable effect in ameliorating the neighborhood symptoms, due in all likelihood to a definite shrinkage of the growth. A widening of the constricted fields of vision serves as a reliable index of any diminution in the size of the struma." A considerable body of information has accumulated since then indicating[8] that in about 70 per cent of the cases, the results of radiation are satisfactory. Comparison of series treated by surgery with those treated by irradiation shows superior results with irradiation.[9] Failures with irradiation are usually due to a cystic condition of the gland.[10] Horrax[11] expresses the viewpoint of most neurosurgeons in recommending x-ray therapy first. With increasing understanding of the bio-physics of radiation, there has come an appreciation of the need

for appropriate tumor dosages in these cases. Tumor doses of about 3,000 roentgens,[11a] accomplished by the use of multiple ports[9] offer the best results. The primary therapeutic object is the preservation of vision.[12] Weekly visual field determinations are advisable. Occasionally there is an early constriction of the fields during treatment but this is not necessarily a poor prognostic sign. Progressive or rapid decrease in the visual fields is an indication for prompt surgical interference, but is rarely encountered with careful radiation. It is important to begin treatment with small doses to prevent sudden swelling of the gland. In addition to the improvement in visual fields, other favorable signs are the disappearance of headaches and a sense of well-being.[13]

CASE REPORT

A 32-year old man was first seen on June 30, 1952, complaining of bitemporal headaches and of excessive weight for five years' duration. In the past 6 months the headaches had become increasingly severe and were accompanied by blurred vision and diplopia. During this period, he had also noticed a decrease in energy and libido and inability to concentrate. His appetite had been good but not excessive. There had been no excessive thirst or frequent urination.

He was 5 feet, 7 inches tall and weighed 220 pounds. His features were coarse, his hands and feet large. There was thickening of facial tissues, moderate prognathism and prominent frontal bosses. Ophthalmologic examination (by J.E.M.) revealed a visual acuity of 20/70 in each eye. This was not correctable by refraction. The pupils were equal, regular and reacted well to light and accommodation. External ocular movements showed no impairment. No evidence of diplopia was elicited during the examination. Visual fields disclosed bitemporal hemianopic scotomata and constriction of the periphery (Fig. 1a.). Examination of the fundi showed normal nerve heads with no retinal hemorrhages.

X-ray study was reported as follows (By L.S.E.) (Fig. 2a):

There is an enlarged and ballooned sella turcica with marked deossification of the dorsum sella, posterior clinoids and sellar floor. The depth of the sella is 13 millimeters and its antero-posterior diameter is 16 millimeters. It is almost 200 square millimeters in lateral area. These measurements indicate enlargement well beyond the upper limit of normal. The pineal gland is calcified and in normal position. There are no abnormal intracranial calcifications. The skull is normal in size, shape and in the thickness and structure of its bony tables. The paranasal sinuses are slightly overdeveloped and there is slight prognathism. The findings indicate an adenoma of the pituitary and the prognathism and sinus development suggest that it may be of the eosinophilic type.

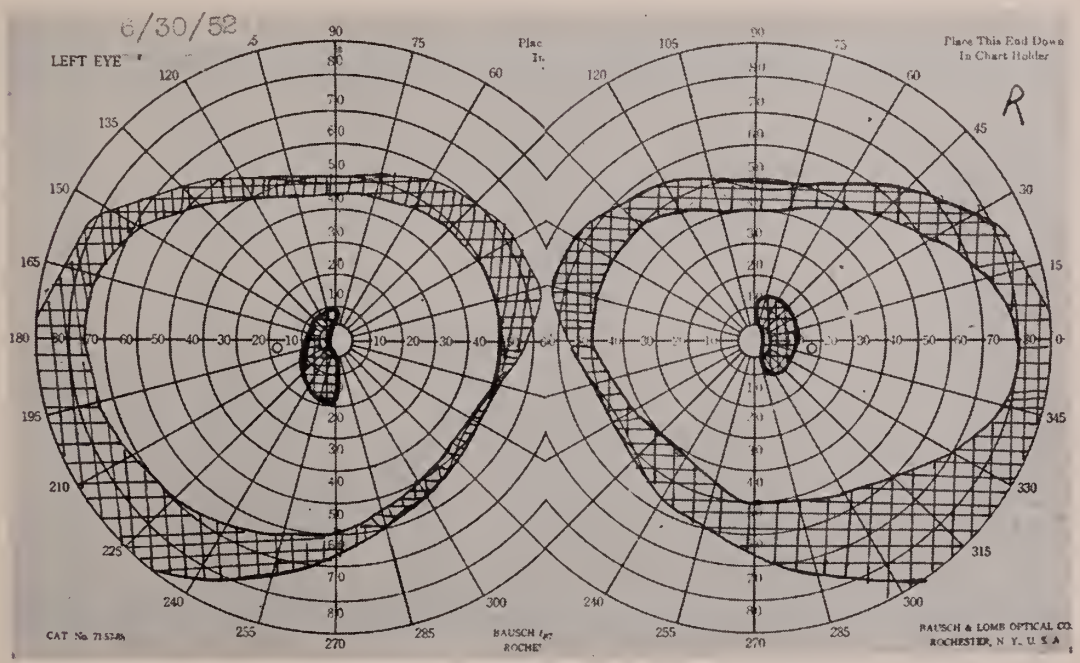

Figure 1 a.

Neurologic examination revealed normally functioning nerves. Tendon reflexes were active and equal. There was no Hoffman or Babinski sign. There was no impairment of sensation, coordination or motor power.

Basal metabolic rate was plus 22. Glucose tolerance test showed a moderately elevated curve. The fasting blood sugar was 130 milligrams per cubic centimeter. The blood count and sedimentation rate were normal. Wassermann was negative.

The clinical, eye and roentgen findings indicated a diagnosis of pituitary tumor of the eosinophilic type and a trial period of x-ray therapy was recommended.

Figure 2 a.

X-ray therapy consisted of 2000 roentgens (air) to each of four portals, a right and left lateral temporal, a vertex and a forehead field. This was administered in the period from August 4, 1952 to September 12, 1952. Factors employed were: 200 KV, 15 MA, 50 cm. target skin distance, and filtration of 0.5 mm. Cu and 1.0 mm. Al. 6 x 8 cm. fields were employed for the lateral ports and 3.5 cm. circular fields for the forehead and vertex ports. The computed depth dose to the pituitary was 3,160 r.

After the first few treatments (100 r, left lateral; 150 r right lateral and 150 r left lateral, given in a three day period) there was a slight increase in constriction of the visual fields (Fig. 1b) accompanied by an improvement in visual acuity from 20/70 to 20/60 on the right, and a diminution in the visual acuity on the left from 20/70 to 20/100. A week later after four additional treatments of 200 r (air) to each lateral port, the visual fields enlarged and the visual acuity was 20/20 on the right and 20/30 on the left. Visual acuity remained unchanged for the duration of the treatment but the visual fields continued to enlarge. The patient's headaches subsided a great deal by the conclusion of treatment and the patient himself, noted a great deal of improvement in his vision.

A recheck examination a month after conclusion

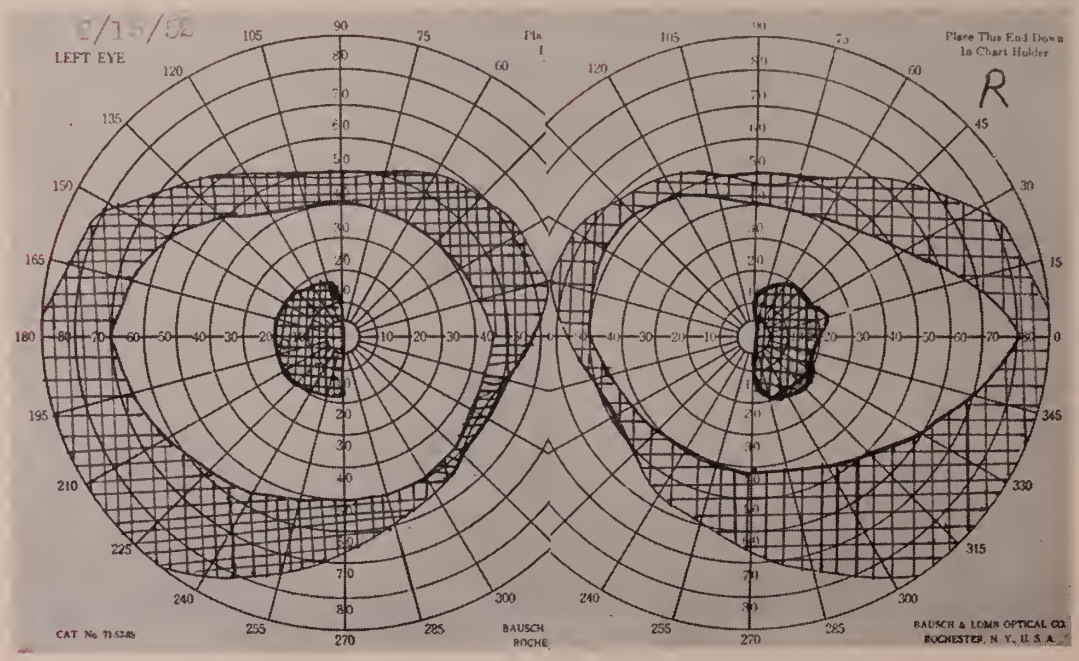

Figure 1 b.

of x-ray therapy showed normal visual fields and a visual acuity of 20/20 bilaterally. The skull roentgenograms disclosed re-ossification of the sellar floor and of the posterior clinoid processes. The size of the sella turcica remained unchanged. (Fig. 2b). Clinically, the improvement was remarkable. The patient had no visual disturbances, headaches, polydypsia or polyuria. His sole complaints were flatulence and easy fatigability. Libido remained diminished. There had been no weight change and the patient was placed on a reducing diet.

The patient has remained well since and recent eye (Fig. 1c) and x-ray studies have shown no further change. It is interesting to note that he lost no time from his work during his period of therapy and that he has been employed steadily since.

Figure 2 b.

The diagnosis of pituitary adenoma requires close cooperation between the internist, ophthalmologist and radiologist. It is based on pressure effects on surrounding structures, particularly the optic chiasm and sella turcica and on endocrine changes. X-ray therapy is the treatment of choice and usually should be tried first. It is successful in most cases. It must be given carefully and during its course of administration frequent determinations of the visual fields and of visual acuity are mandatory since preservation of vision is the physician's first responsibility. There is usually a slight constriction in the visual fields after the first few roentgen treatments attributable to swelling of the tumor as a result of radiation. However, rapid or progressive constriction of the fields or diminution of visual acuity are indications for surgery.

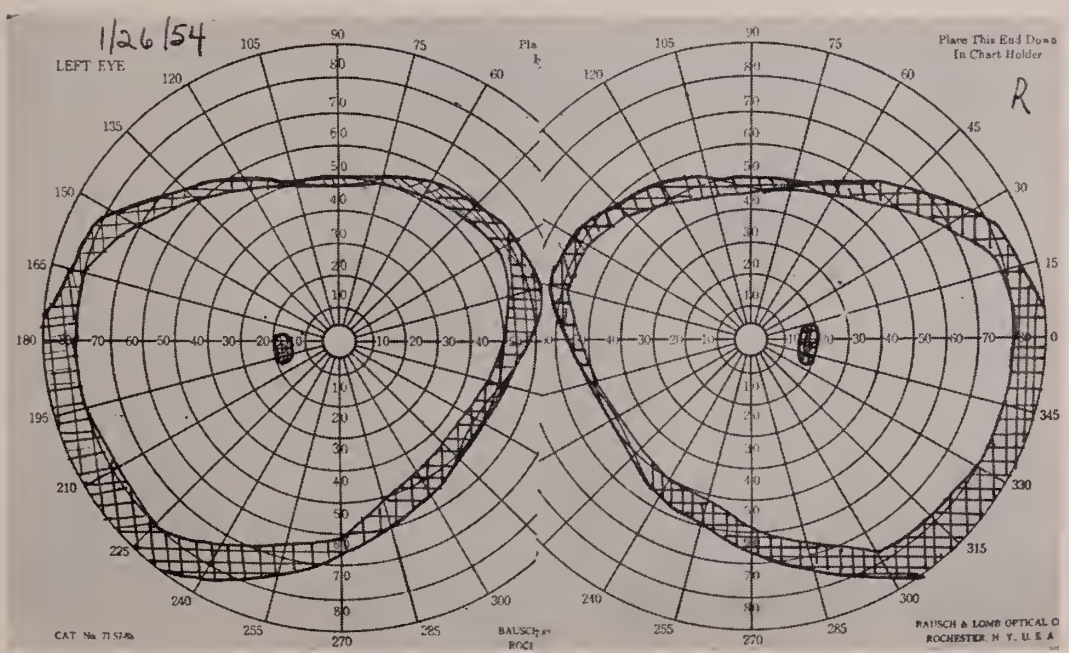

Figure 1 c.

SUMMARY

A CASE of eosinophilic adenoma of the pituitary successfully treated by x-ray therapy is presented. The findings before, during and after therapy are described and illustrated. Of especial note are the restoration of visual fields and of visual acuity to normal, the subsidence of headache and the regained sense of well-being after the x-ray therapy. It is interesting that the patient was gainfully employed throughout the course of treatment and has continued to work without interruption.

1616 Pacific Avenue

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Weather is Worth Talking About

Blaming the weather for "blue" moods and bad colds is not at all unscientific, says Noah Fabricant writing in *Today's Health* (January 1955). Weather changes are reflected in all of the body's processes, and can have an effect on emotions, colds, asthma, heart disease, and suicide. The weather can be "the straw that breaks the camel's back."

Every change in weather involves a physiologic adjustment in everyone. Colds increase when temperature drops because the membranes of the nose and throat become altered and fall easy victim to invading germs. The form of the nose depends on the climate — the colder the climate, the narrower the nose. Eskimos have narrower noses than Africans.

One way to prevent the shock of going from an air-conditioned room into the heat, or from a heated room into the cold, is to have a closer adjustment between the two atmospheres. A number of diseases will respond to controlled weather and climatic conditions. Though more than a beginning has been made toward deflating the common cold nuisance, it is reasonable to expect that in the future attention to controlled atmospheric conditions will play a role in ameliorating colds.

Jack August, M.D.

East Orange

Cysts of the Mesentery: Report of a Case

In its half-century of existence, the Martland Medical Center in Newark (formerly City Hospital) has never had a case of mesenteric cyst. Here, for the first time in its busy history, a case is reported from that institution.

Cysts of the mesentery (which include any cystic tumors lying between the folds of the mesentery or beneath the serosa of the intestine) are said to be the rarest of all abdominal tumors, notwitstanding sporadic reports of single or perhaps several cases and occasional summaries.[1-6] Vaughn, Lees and Henry [6] in 1948 reported the third case occurring in 750,000 admissions in 98 years to Mercy Hospital, Chicago. Judd and Crisp [7] stated that in 820,000 admissions to the Mayo Clinic 25 mesenteric tumors were found. Only eight of these were cystic, an incidence of less than one in 100,000 cases. Porter [8] found only two cases in 200,000 admissions to two hospitals in Duluth. Failure to diagnose the condition may account for the relatively small number of reported cases. Successful treatment of the first mesenteric cyst recorded at the Harrison S. Martland Medical Center (formerly the Newark City Hospital) since its inception in 1906 prompted the author to present the following case report and a discussion of diagnostic methods.

A 4-year old boy entered the Harrison S. Martland Medical Center on June 8, 1953. He was well until three months prior to admission. At that time he complained of occasional abdominal pain. His mother noticed that his abdomen was becoming larger. The diagnosis made by the physician who referred him to the Medical Center was ascites, probably resulting from tuberculous peritonitis. The child was of normal weight and development. He had had no injury, contagious diseases, or chronic illness. He had had no contact with tuberculosis in the immediate household.

The patient did not appear to be acutely ill. His temperature was 99.5, pulse 84, respirations 20. Except for a protruding abdomen and the suspicion of fluid in the abdomen, there were no positive findings. There was no evidence of masses or tenderness in the abdomen. No varicosities or hemorrhoids were present. The impression was that of ascites secondary to tuberculous peritonitis.

The blood picture on admission was: red blood cells, 4,000,000; white blood cells, 5,400; neutrophils, 68 per cent; lymphocytes, 32 per cent; no sickle cells; hemoglobin, 78 per cent; sedimentation rate, 3 millimeters per hour; blood protein, 6.5 Grams (albumin, 4.2, globulin, 2.3); blood cholesterol, 210; cephalin flocculation, negative. Blood urea nitrogen was 7. Wassermann, negative. Urinalysis showed an acid reaction and specific gravity of 1.032. Albumin, glucose, and microscopic examinations were negative. Repeated urinalyses, urine cultures, and gastric washings were negative for tubercle bacilli. Stools were negative for ova or parasites.

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6. Vaughn, A. M., Lees, W. M., and Henry, J. W.: Surgery 23:306 (1948)

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A roentgenogram of the chest showed accentuation of the bronchovascular markings in both lung fields but no localized infiltration. A scout film of the abdomen revealed some veiling of the psoas shadow and of the kidneys, indicative of ascites. A barium enema disclosed no evidence of an intrinsic or extrinsic defect in the large intestine. A series of gastro-intestinal roentgenograms showed no abnormalities. An intravenous pyelogram gave evidence of good function in both kidneys. The urologist suggested ascites as the cause of the abdominal distention. The Mantoux test was negative.

Because of the diagnosis of ascites of problematic origin, an abdominal paracentesis was performed, and 480 cubic centimeters of non-odorous, milky, free flowing fluid were obtained. Analysis of this fluid showed a large number of lymphocytes, protein 60 Grams per liter, and no tubercle bacilli on smear and culture.

To determine the cause of the ascites, on August 5, 1953, a laparotomy was performed through a right paramedian incision. The abdominal cavity contained no free fluid. A cyst, about the size of a grapefruit, was present between the leaves of the mesentery about 12 centimeters distal to the duodenojejunal junction and 10 millimeters from the mesenteric border. In its wall was a small hematoma, the site of the paracentesis. The mesentery throughout the small bowel was studded with enlarged lymph nodes. The cyst was carefully enucleated and the edges of the mesenteric leaves were sutured. A lymph node some distance from the site of the cyst was removed for microscopic examination.

The pathologist reported the specimen to be a multiloculated cyst measuring 10.5 by 2.5 centimeters. It contained a milky fluid. Microscopic examination showed an increase of fibrous tissue reaction with collections of lymphocytes, plasmocytes, and occasional polymorphonuclear leukocytes. Examination of the lymph node showed the presence of chronic lymphoadenitis.

The patient's progress was uneventful and he was discharged on the twelfth postoperative day. At examination eight months later the abdomen was of normal size and the patient had no complaints.

Because of the inspissated content of this cyst, the large number of lymphocytes, and the absence of fat in the fluid, the cyst appears to have resulted from degenerating lymph nodes. The presence of a large number of enlarged lymph nodes in the mesentery throughout the small intestine is additional evidence of this pathogenesis. The absence of tubercle bacilli or caseation nullifies the preliminary diagnosis of tuberculous peritonitis. If the cyst had been enterogenous, some epithelial inclusions and a more mucoid content would have been found.

It is predicted that this patient will develop future cysts of the mesentery as a result of the coalescence and degeneration of lymph nodes.

The first recorded observation of mesenteric cysts is attributed to Benevieni, a Florentine anatomist, who in 1507 noted them during necropsy and called them "anatomic curiosities."[9] A chylous cyst was first described in 1842 by von Rokitansky,[10] and the first cure of a mesenteric cyst was effected in 1888 by Tillaux.[11] From 1880 until 1900 only a few patients survived surgery for this condition. Since 1900 the survival rate and the number of cases diagnosed before operation have been increasingly higher.

Ewing[12] classified them as (1) lymphatic or chylous, (2) enteric, (3) urogenital, and (4) dermoid and teratoid. A more workable grouping is that of Beahrs, Judd and Dockerty,[13] who also divided them into four types: (1) embryonic and developmental (including enteric, urogenital, lymphoid, and dermoid cysts); (2) traumatic or acquired; (3) neoplastic, and (4) infective and degenerative (including mycotic, parasitic, and tuberculous lesions). Some of the developmental cysts appear to be due to diverticuli from the intestine in the embryo. These extend between the leaves of the mesentery and become pinched off. Some are absorbed and others remain to form cysts.

Abdominal pain is the chief complaint and may be dull, acute, constant, or intermittent. When it is acute it is usually associated with some change in the cyst and portends a serious complication. As in the case reported, the abdomen enlarges progressively, and some patients complain of a feeling of weight in the abdomen. Dyspepsia, constipation, and urinary frequency may be present. The cyst may rupture following trauma, and hemorrhage into the cyst may cause obstruction of the blood supply and bowel lumen. Lowman[14] estimates that 40 per cent of the cases of mesenteric cyst

9. Swartley, W. B.: Ann. Surg. 85:886 (1927)

10. Rokitansky, Carl von: *Handbuch der pathologischen Anatomie*, vol. 1. Wien, Braunmüller u. Seidel, 1842.

11. Braquehaye, J.: Arch. gén. de méd. 2:291 (1892)

12. Ewing, J.: *Neoplastic Diseases: A Treatise on Tumors.* Philadelphia, W. B. Saunders Co. (1950)

13. Beahrs, O. H., Judd, E. S., Jr., and Dockerty, M. B.: Surg. Clin. N. America 30:1081 (1950)

come to surgery because of intestinal obstruction. From this it follows that a mesenteric cyst should be suspected in the presence of obstruction or of alteration of the blood supply to the bowel. An abdominal mass, firm, soft, or tender, occasionally is palpable.

Roentgenographic examination is helpful but not wholly reliable in establishing the diagnosis. The scout film is of little assistance unless ascites is present, as in the case reported; or unless the cyst is calcified, as in the cases of Vaughn,[6] Hinkel,[15] and Burnett, Rosemond, and Bucher.[5] The barium meal aids in ruling out any possible connection of the cyst with the gastro-intestinal tract. A pyelogram will rule out tumors of the genito-urinary tract. Pneumoperitoneum and peritoneoscopy have been used with some success as diagnostic measures.

Surgical exploration is mandatory in all cases with symptoms of mesenteric cyst. This is done to rule out more serious lesions and treat them when present. It also prevents complications and precludes the possibility of malignant degeneration. Total excision is the procedure of choice. However, this is often not possible without resection of the adjacent bowel, a required procedure if removal of the cyst has destroyed the blood supply to a segment of the intestine. In an analysis of 200 cases it was found that mortality was lowest following marsupialization and enucleation (4.4 and 6.9 per cent, respectively) and increasingly higher following resection, aspiration, and drainage (15.9, 33.3, and 60 per cent, respectively).[5] Marsupialization should be performed when the cyst is intimately attached to vital structures and their removal would be hazardous, or when the patient's condition precludes a longer procedure. A draining sinus and varying degrees of excoriation of the skin usually result, but healing takes place in about three months. Recurrence of the cyst with this type of treatment is its chief disadvantage. Internal drainage is possible, but no cases in which this procedure was used have been reported.

14. Lowman, R., Waters, L. L., and Stanley, H. W.: J. Internat. Coll. Surg. 18:265 (1952)

15. Hinkel, C. L.: Am. J. Roentgenol. 48:167 (1942)

SUMMARY

A CASE of mesenteric cyst, the only one on record at the Harrison S. Martland Medical Center in the more than fifty years of its existence, is reported. The patient, a 4-year old boy, made an uneventful recovery following enucleation. The condition, if recognized, may prove to be less rare than has been generally believed. Methods of diagnosis are suggested.

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The Value of Tuberculin

The importance of the tuberculin test in the program for the elimination of tuberculosis cannot be overestimated. The percentage of positive tuberculin reactors is an indirect measure of the amount of undetected open tuberculosis in the community. The presence of a positive tuberculin test pinpoints the individuals which comprise the group in which new active cases will develop. The discovery of a recent conversion from a negative to a positive tuberculin reaction means that there is a known or unknown active case among the converter's associates. David T. Smith, M.D., J. School Health, Sept., 1954.

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Developmental History of Cardiac Surgery: The Pre-Scientific Era

Until the dawn of modern science, the heart was deemed so vulnerable an organ, that no physician dared operate on it. Heart wounds were considered automatically fatal. This assured pessimism had a real effect on the history of cardiac surgery. In this scholarly review, Dr. Henderson paints the picture of primitive concepts of heart function. We are promised a review of later developments in cardiac surgery in an early issue.

"But when you have seen, read. And when you can, read the original descriptions of the masters who with crude methods of study, saw so clearly."[1]

Human cardiac surgery has in our time become a reality. Valvular surgery, particularly of the mitral and pulmonic valves, is now an established and scientific procedure. To be sure, it is still a young and immature science, but throughout the world the concepts and fears of the past are swiftly being replaced by the latest child of surgery. It is, therefore, fitting now to review the past; look back along the path for the trailmarks that have been left there by those whose labors have made this surgery possible.

The developmental history of the heart and circulation and the ultimate application of surgery to this system closely parallel the history of the human race and science in general. It is, therefore, a long story and this history falls into three parts. This paper deals with the pre-scientific era, ending at the close of the fifteenth century. Later came the era of scientific investigation, beginning with the rebellious contributions of Servetus, Cesalpino, Harvey, Malphighi and others. The era of scientific investigation has not ended and so today's story, the era of scientific application, overlaps the period of investigation. It began about the middle of the nineteenth century when serious consideration was first given the idea of dealing instrumentally with certain cardiac lesions.

ANTIQUITY

In spite of the surgical advances made through the past centuries in skeletal and visceral diseases the intrathoracic organs continued to be left solely to the care of the gods and fate. This was then not unreasonable because it was an obvious fact, reinforced with each war and each accident, that an open thorax was incompatible with life. With the escape of the "humors," the vital spirit and the soul there was no longer reason for living and no attempt was made to interfere with natural consequences. The heart was the seat of the

soul. Aristotle believed this, and also that it was the source of the "vital heat" of the body. Since Aristotle said this, there was no room for argument for in antiquity, his was the final word.[2] The holiness of the heart was universal knowledge. The Mesopotamians to the east knew for a fact that the heart was the site of the intellect, the chief organ, the origin of all nervous functions. After all, as long as there was a heart beat there was life!

Even primitive peoples attempted to control hemorrhage and approximated wound edges. Wounds were tightly wrapped and some groups packed bleeding wounds with hot sand. The cautery was freely used. But wounds of the heart were not to be treated. They were necessarily fatal, for the container of life itself could not be repaired by mere man. It was as : ". . . a living creature inside its possessor."[3]

The oldest record available to us concerning ancient medicine, the Edwin Smith Papyrus,[4] reveals that the Egyptians, even 3000 B. C. knew of the origin of the pulse and the pumping function of the heart.[5] But with all their magnificent civilization, they feared wounds of the intrathoracic viscera. Case 44 of this great papyrus reads:

"If thou examinist a man having a break in the ribs of his breast, over which a wound has been inflicted, and thou findest that the ribs of his breast crepitate under thy fingers, thou shouldst say concerning him: one having a break in the ribs of his breast, over which a wound has been inflicted, an ailment not to be treated."

Fifteen hundred years later (about 1550 B. C.) there was no progress for in the Ebers Papyrus[6] of that date the function of the heart is still described as the "seat of the intellect and emotions." It was such an important organ for here and the here-after that it alone of all the organs was left intact during the process of mummification. Early funnery papyri often show the heart being weighed upon the scales counterpoised by the emblem of truth.

In the Bible[7] the heart is no less hallowed. With reference to the evil generation of the Deluge: "Every thought that originated from the heart was only for evil." And: "The heart which governs the thoughts and the deeds of the human being, and the womb (rechem), the seat of the emotions (rachmim) were the two organs responsible for man's transgressions, therefore, both were cursed with suffering, agonizing pains (etzev)."[8] Immediate death after receiving heart wounds was the fate of Asahel and Amasa as revealed in Samuel II.

The intimacy of the heart and soul and the inevitable fatality of its wounds are read again and again in the literature of the past. The earliest epic poem of ancient Greece, the Iliad of Homer (950 B.C.) records the effect of the wound of the heart suffered by Sarpedon at the hand of Patroklos:

". . . then drew the weapon from his panting heart,
The reeking fibers cling to the dart.
From the wide wound gushed out a stream of blood,
And the soul issued in the purple flood."

Epaminondas in 362 B. C. made his last expedition into the Peloponnesus. During the battle he received a spear injury. The head of the spear lodged in his heart. Diodorus Siculus (40 B. C.) wrote:

"And Epaminondas, yet living, was brought to the camp; and when the physicians that were sent for told him that he would certainly die as soon as the dart was drawn out of his body, he was not at all daunted, but first calling his armour-bearer he asked whether his shield was safe. The armour-bearer said it was and showed it to him. Then he inquired which side had won the day. "Why, then!, said he, 'now is the time to die," and forthwith ordered that the dart be drawn out, and so upon the drawing out of the head of the dart, he quietly breathed his last."

At least a century before the Hippocratic writings, Alcmaeon of Crotona (about 500 B. C.), a pupil of Pythagoras, was the first to step out of line to reject the supremacy of the heart for that of the brain.[9] He also distinguished the veins from the arteries. Castiglioni asserts him to be the first to practice anatomic dissections.

Herophilus (330 to 300 B. C.) also rejected the supremacy of the heart for that of the brain. But the opinions of Alcmaeon and Herophilus were unimportant, especially since they did not corroborate Aristotle's. Aristotle's

word was not to be disputed and he had said: "The heart alone of all the viscera cannot withstand serious injury. This is to be expected because when the main source of strength (the heart) is destroyed there is no aid that can be brought to the other organs which depend upon it." When we look at Aristotelian (384 to 322 B. C.) science in the light of the civilization of his day, however, we cannot be too critical. He knew a great deal about the circulatory system, in spite of his concept of the three-chambered heart, and in spite of his final interpretations (e.g. that the heart was the source of the blood; the pulmonary arteries and veins were not part of the circulatory system; the heart was the source of animal heat; and so forth). William Harvey constantly refers to him. In his old age, Harvey advised a young student: "Go to the fountainhead and read Aristotle, Cicero and Avicenna."[10]

Hippocrates (460 to 370 B. C.) was well acquainted with the internal and external structure of the heart and pericardium. He could not free himself from the preceding ideas entirely and held that the left ventricle was the "seat of understanding." He did not think that the heart was subject to disease or pain. He believed wounds of the heart to be immediately fatal.[11]

Ovid (43 B. C. to 17 A. D.) stated: "*Sanabit nulla vulnera cordis ope*," referring to the inoperability of heart wounds. And: "Although Aesculapius himself applies the sacred herbs, by no means can he cure a wound of the heart."[12]

A contemporary of Ovid, Celsus describes the death produced by a wound of the heart: "The heart being wounded, blood escapes in abundance, the pulse vanishes, there is extensive pallor, there occurs cold and malodorous drops of sweat all over the body, the extremities become cold and death follows." Celsus also cautioned against opening the uninitiated pleural cavity: "Nor is anything more foolish than to suppose that whatever the condition of a part of a man's body in life, it will also be the same when he is dying, nay, when he is already dead; for the belly indeed, which is of less importance, can be laid open with the man still breathing, but as soon as the knife really penetrates to the chest, by cutting through the transverse septum (diaphragm), the man loses his life at once."[12]

Pliny (23 to 79 A. D.) agreed with Hippocrates that the heart did not suffer disease, but stated: " . . . but when injured, it produces instant death."

Galen (131 to 201 A. D.) was the greatest physician after Hippocrates. Widespread acceptance of Galen's doctrines began the long night of the dark ages which was to last 14½ centuries. Galen was physician to the gladiators. Thus, he practiced traumatic surgery more than anything else and his experience covered all manner of wounds including those of the heart. Of these he states: "If a ventricle were wounded these gladiators died very soon, and especially so if the left ventricle were wounded. If it was a non-penetrating wound, they sometimes lived until the following day, and as long as they lived they were of sane mind, which is testimony that the heart is not the seat of the mind."[12]

Many references can be cited which reflect the ancient doctrine that heart wounds were necessarily fatal. This hopelessness was to persist through the Dark Ages, to be lightened somewhat by the Renaissance but not to be overcome for another seventeen-hundred years, during which time the doctrines of Galen, (based upon Hippocratic medicine), together with the science of Aristotle became the infallible and unquestionable dogma, the articles of faith of physicians. Little or nothing new was contributed to the profit of the sick during the Dark Ages. The supernatural reigned over experiment. What anatomic dissections were done were performed to demonstrate the words of the ancient masters, not to question them.[13]

If it was difficult enough to cure a wart in these dark days, what of the heart? Paulus Aegineta (AEgineta), the last of the great Byzantine physicians, writing in the seventh century, believed that in the treatment of em

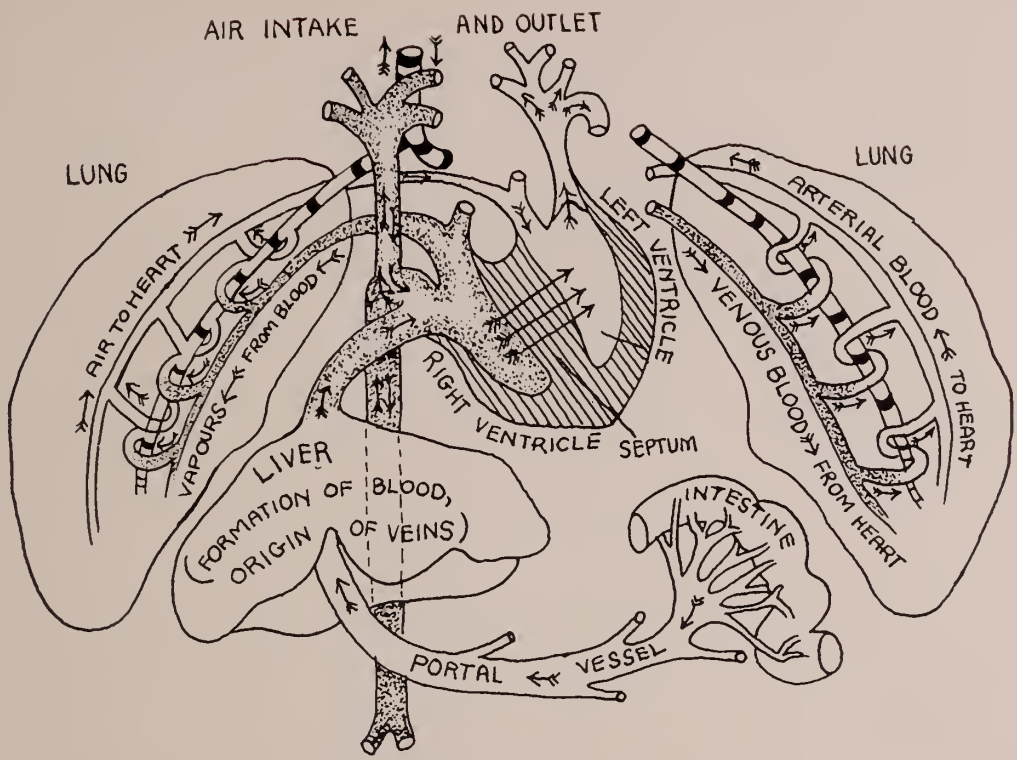

Diagram of the circulatory system according to Galen. The lung on the left represents the pulmonary circulation as proposed by Servetus. (Modified from Charles Singer, 1931.)

pyema: ". . . those who burn with iron to a considerable depth either occasion sudden death (from reaching the heart), the vital spirits then being evacuated with the pus, or occasion incurable fistulae." Ann Comnena (12th century), in her *Alexiad*,[14] describes the treatment of heart disease in her era. This is revealed in the account of her father's illness and final death from, obviously, congestive heart failure. For some reason or other, the purgatives, the bleedings, exercise, pepper and cautery did not save him. In this same century, Roger of Palermo (about 1250) considered the founder of the modern Italian surgical school, was one of the first to crack the ancient vise which sealed the imagination of man. In reference to wounds of the heart, he stated that ". . . these could be diagnosed but not treated . . . all are mortal and beyond cure."[13]

The Persian, Ali Abbas (died in 994 A.D.), one of the greatest physicians of the Eastern Caliphate, described a rudimentary conception of the capillary system.[15] Avicenna (980 to 1037), the most famous scientist of Islam, whose thought represents the climax of mediaeval philosophy, wrote a treatise on cardiac drugs.[15] He also wrote extensively about the pulse. He considered himself such an authority on the pulse that he could predict the sex of an unborn child from the pulse of a pregnant woman[16] . . . not too great a feat for a man who had memorized the Koran in his tenth year and who not only practiced but taught medicine when sixteen years of age!

An interesting anatomic treatise was written by Copho of Salerno in the second half of the eleventh century.[15] This marked the beginning of anatomic research in western Christian Europe. It is based on the assumption that the pig is, of all animals, the one whose internal structure is nearest to that of man. This is, in part, true as modern cardiovascular researchers have come to learn that of all animal hearts, the pig heart most resembles that of man.

It is bitterly disappointing to scan briskly fifteen-hundred years of medical history from

Aristotle to the thirteenth century, and to find the most learned men at the proximal end of this span still housing the "vital spirits" and the soul within the heart. Mirroring Aristotelian cardiac physiology, almost completely unchanged and unimproved, is Alfred of Sareshel of England even after fifteen stagnant centuries. In his treatise *De motu cordis* (about 1210) we find a stew of the Greek, Muslim and Salernitan renditions of Aristotle's cardiovascular system. The unimproved condition of the state of knowledge concerning the heart was reemphasized only fifteen years later when Ricardus Anglicus published his *Anatomia* wherein much space is devoted to the relative importance of the heart, brain and liver and in explaining the vague differences of opinion between Galen and Aristotle. The conclusion is in Aristotle's favor.[17] Mondino de Luzzi's description of the heart in his *Anatomia Mundini*, a hundred years later, was no less crude and resembled that of Avicenna.

THE narcosis of the Dark Ages began to wear off in the fifteenth century. The monk, Sarzani, rediscovered Celsus. Hippocratic medicine was reborn. Among the early risers; "awoke too early in the darkness while all the others were still asleep,"[13] was Leonardo Da Vinci (1452 to 1519). He gave great stimulus to an awakening age by his critical and experimental attitude. His fundamental attitudes are strictly modern.[18] He was constantly questioning and disagreeing with the ancient ideologies. "The drawings today are enough to grant him a unique place in the school of anatomical illustrations, of which he is the accepted founder."[19] One of his chief interests was the heart and circulation. One-fourth of his drawings were related to that subject. His cardiovascular feats are many and are excellently reviewed by Klebs.[20] He not only described the anatomy of the heart valves, but also the function of them. He recognized the role of systole and diastole and the alternation of auricular and ventricular systole. He made wax models of the semilunar valves and studied their mechanism in detail: his sketches show blood swishing about the valves. He cast off the ancient cloak of obscurity and inaccuracy and said: "To me it seems impossible that any air can enter the heart through the trachea."[21] He accurately described the "moderator band" from the septum to the ventricular wall and said it prevented over-distention of the ventricle. He knew that the coronaries nourished the heart. He described the movements of the heart by placing long needles in the heart and studying their arcs of motion. In reference to the ancient science he says: "All this is not so. There is no higher or lower knowledge, but one only, flowing out of experimentation."

THE vise is forced further. Flemish born Andreas Vesalius (1514 to 1564) adds his force. His seven volumes on human structure, (*De Humani Corporis* - 1543), laid the foundation for the new anatomic physiology developed in the seventeenth century and for the new science of pathology developed in the eighteenth century. Whether the works of Vesalius were really his, as claimed by Roth,[22] or those of others, such as Stephen of Calcar,[23] is still debatable; but their influence as a stimulus to the rebirth of medical science is genuine. They proved the erroneous quality of Galenic anatomy.

The ancients are further disposed of when Paracelsus (1493 to 1541) publicly burned Galen's works in 1527 as an introduction to his own lectures. The "provincial barber's apprentice, who developed into the Hercules of the century,"[13] Ambroise Pare (1510 to 1590) proved that wounds could heal by primary intention by abandoning the ancient oil and later (1564) the burned-out cautery.[24] He observed that heart wounds were not always immediately fatal:

> " . . . yet when I was at Turin I saw a certaine gentleman, who fighting a Duell with another, received a wound under his left breast which pierced the substance of his heart, yet for all that he strucke some blowes afterwards, and followed his flying Enemie some two hundred paces until he fell downe dead upon the ground; having opened his body, I found a wound in the substance of the heart, so large as would containe one finger; there was only much blood poured forth upon the midriffe."[12]

Fallopius of Ferrara (1523 to 1562), a student of Vesalius, stated: "Wounds of the heart are always fatal. When wounded it cannot heal, being too firm, always in motion, and of an inflammatory heat."

Michael Servetus (1509 to 1553)[25] described the lesser circulation as did Colombo (1494 to 1559?).[26,27] These two men are generally given credit for the discovery in spite of the earlier, but ineffectual, work of Ibn Nafis[28] (about 1200). The vise on scientific intellect was further released by many others: Sylvius Dubois, Eustachi, Cesalpino, Fabricus, Piccolomini and Aranzio, to mention but a few who, by their inquiry and observations, developed our knowledge of the heart and the circulation. In addition, they elevated still higher the plane of medical science from the mire of mediaevalism and inertness.

To be sure, medicine was hardly a science before this but almost purely an art. At the close of the pre-scientific era, we begin to see the infiltration of science into medicine. During the next three hundred years, we shall see the science upon which the art is based grow in ever-increasing proportions. With time the motives will become even more sound, scientific vision on an ever-widening horizon and shorter and straighter paths will be found between the two.

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A bibliography of 28 citations will appear in the author's reprints.

Pre-Crisis Surgery

The difference between life and death in certain heart diseases can depend on less than a thimbleful of blood a minute, which now can be supplied by the heart itself with the help of surgery. Beck and Leighninger in the November 27 (1954) J.A.M.A. said that the "revascularization" operations can be performed on selected patients with coronary artery disease. They began their work in the revascularization approach to heart disease in 1932, performed 5,000 experimental operations on animals and later 186 operations on patients. A follow-up study of 25 patients showed mortality rates were improved and four out of five patients who survived had complete or marked reduction of pain. They also were better able to work afterwards.

In occlusive disease heart failure death is either mechanical or muscular. In muscular failure, the blood supply shortage causes damage to the heart muscle. In mechanical failure, however, the heart would be capable of functioning but fails because impaired circulation to the conducting mechanism interrupts the coordinated heartbeat.

It is the mechanical type of heart failure which strikes "a vast segment of our population" and which can be surgically prevented. Although surgery cannot stop the occlusive process, it can provide the small quantity of blood which protects the coordinating mechanism and saves life.

Less than a thimbleful of blood a minute could be sufficient for protection. Improved circulation for providing this amount could be achieved either by adding blood from outside sources or by improved distribution of blood in short supply. They developed two operations for achieving improved circulation. In one, the heart is stimulated by an irritating agent such as powdered asbestos, and tissue and fat are grafted to the heart surface. In the other operation a vein graft is connected to a channel leading into the heart and the channel is later pinched in to raise pressure.

The operations can be done only on those patients whose vessels have become plugged but in whom an occlusion crisis has not occurred.

Best suited for the operation are lean persons in their 40s or 50s who have had the disease for a year or so, have pain, but are still able to get around. Patients with heart failure from degenerated heart muscle are not acceptable.

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Osgood-Schlatter's Disease*

Its Development and Treatment

The development of Osgood-Schlatter's Disease becomes clear when it is realized that what is involved is a shearing force directed against an oblique patellar tendon. Normal weight bearing devices will decrease the obliquity and end the symptoms.

Osgood-Schlatter's disease is a partial separation of the tubercle of the tibia. Most orthopedists agree that trauma is the cause; but the mechanism whereby trauma brings about the syndrome is poorly understood. It would be helpful if this mechanism could be established, because proper treatment could then be worked out.

During the past four years, we have studied 23 cases of Osgood-Schlatter's disease. This paper is an analysis of those cases with a view towards developing an explanation of the causative mechanism and a rational treatment. It will be noted that this is a clinical study only. We have found that roentgenographic results are not reliable, because the roentgenographic picture supposed to be characteristic of the disease can be duplicated in some asymptomatic individuals.

CAUSE

The epiphysis of the tibial tubercle develops at about the age of 11 and closes some four years later. Most patients with Osgood-Schlatter's disease are in the 11 to 15 age group. Nineteen of the 23 in our series (that amounts to 83 per cent) were boys.

In examining these cases, we noted that all patients, when standing erect, presented an abnormal angle of insertion of the patella tendon into the tibial tubercle. This abnormal angle was produced by either (a) marked pronation of the feet (b) inward displacement of the patella or (c) genu valgus.

A shearing force is involved in producing fracture or fragmentation of the open tibial tubercle epiphysis by the obliquity in the course of the patella tendon. The greater the physicial activity and the greater the obliquity, the more frequent the occurrence of signs and symptoms.

SYMPTOMS AND SIGNS

Pain is noted in one or both knees on standing, going up or down stairs, running or on direct pressure as in kneeling. Pain is localized by the patient at the region of the insertion of the patella tendon (tibial tubercle).

One prominent sign is pain on pressure over one or both tibial tubercles. Moderate to

*From the Department of Orthopedic Surgery, Hospital of St. Barnabas and for Women and Children, Newark, N. J.

marked degree of soft tissue swelling is noted over this site along with occasionally bony irregularity. Pain is invariably increased by moving the patella laterally. This sign may likewise be of some significance in the explanation of the pull of the patella tendon in an abnormal angle.

All patients, when examined in a standing position, presented either (a) marked pronation of feet (b) inward displacement of patella or (c) genu valgus.

X-rays will show either separation of epiphysis from diaphysis; or a fracture of epiphyseal plate with fragmentation; or ossification in the region of the patella tendon.[1]

PATHOGENESIS

Cole [2] believed that the process is one of stress from the quadriceps to the tibial tubercle at a time when the tibial tubercle could least stand the strain. We agree with this. Indeed, we think it unfortunate that therapy along this line had not been previously established. In 1937 Cole [2] and in 1944 Uhry [3] reported microscopic studies of sections removed from the area of the tibial tubercle at operation. These studies showed hemorrhage, clotting, invasion of fibroblasts and connective tissue. In other sections there appeared typical fractures with non-union and increased vascularity of the tendon at its attachment to the tubercles.

In no case has any nontraumatic cause been established.

TREATMENT

Prior to this study, the authors treated Osgood-Schlatter's disease with posterior splints; or cylinder plater casts; or surgical removal of the fragmented tibial tubercle. This conservative treatment frequently proved unsuccessful for 1 to 1½ years. Surgical treatment was successful but radical. Now, we treat this way:

(a) Raise inner side of heels with the use of a longitudinal arch support or insert scaphoid pads.
(b) Do this to both shoes to prevent a similiar lesion from developing in other knee.
(c) This is continued until patient reaches age of 15.

The response to therapy showed relief of symptoms and signs within six weeks in 20 cases; and within 12 weeks in the other three. All patients remained symptom-free.

CONCLUSIONS

Osgood-Schlatter's disease is due to multiple traumata by shearing force against an oblique patellar tendon. The best treatment is to decrease the obliquity by restoring normal weight-bearing.

1. Hughes, E. S.: Surgery, Gynecology and Obstetrics, 86:323 (1948)

2. Cole, J. P.: Surgery, Gynecology and Obstetrics, 65:55 (1937)

3. Uhry, E. J.: Archives of Surgery, 48:406 (1944)

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Harvey Bluestone, M.D.
Cedar Grove

Lobotomy at Overbrook

Report of Fifty-four Cases

Few operations are as dramatic or potentially glamorous as lobotomy. Although the literature is heavy with reports on this procedure, it is hard for the general practitioner to get a simple answer to his natural query: how effective is it? Most reports are cluttered with elaborate rating scales, indices and complex methods of evaluating results. Dr. Bluestone here presents the problem with clarity and simplicity.

One of man's age-old dreams has been the surgical operation that would open the skull and let the devils out. To primitive man, mental disease must indeed have seemed the work of devils within the head. Modern man has a more sophisticated variant of that concept. In one form of mental disease, at least, an undue reaction to internal stimuli seems to be causing the trouble. The violent or over-aggressive psychotic patient typically over-reacts to stimuli generated within his own mind. Or, he sees or hears something outside himself, but when it "enters his head" as it were, it reverberates causing undue reaction. It is as if the sensory part of the brain received stimuli and then transmitted them too rapidly and too strongly to an emotional center. The emotional center, assailed by these harsh stimuli, reacts by anger or rage.

Lobotomy aims to cut this vicious chain by severing some connections between the sensory and the thalamic parts of the brain. The literature* is already richly supplied with articles on the theoretical, technical and surgical aspects of lobotomy. There is no need to repeat these items here. What may be of interest to New Jersey citizens is this report of a half-hundred lobotomies done in the nation's largest county mental hospital.

This is a review of 54 psychosurgical operations done at the Essex County Overbrook Hospital in the six-year period ending September 1, 1954. Dr. Raymond Wolf of Glen Ridge did most of the operations. Dr. Richard Swain of Newark did some and Dr. John Papere of Caldwell assisted at many. We of the Overbrook staff are grateful to these surgeons for their time, interest and craftsmanship. In all but one case, the operation was the conventional bilateral lobotomy. In case No. 1, the operation was a gyrectomy followed by a topectomy.

Indications: As in most psychiatric hospitals, lobotomy was an operation of last resort. Generally the indication was assaultive, disturbed and aggressive behavior in a patient

*The periodical literature runs to well over a thousand cases. Probably the most definitive book on it is *Psychosurgery* by Walter Freeman and J. S. Watts (Charles Thomas, Springfield, Illinois 1950). One of the most compact summaries of lobotomy will be found in the Veterans Administration Technical Bulletin entitled *Leucotomy*. Excellent explanations of technic, indications and results are in Leo Alexander's *Treatment of Mental Disorder*, Saunders (Philadelphia 1954).

who had received persistent but unsuccessful treatment by other methods. In theory it is unfair to measure any procedure if it is used only on desperate cases. Even the best of the antibiotics would have a poor record if it were given only to moribund patients. But, it has not been deemed judicious to subject a patient to a procedure which permanently destroys part of his cerebrum until more conservative methods have first been tried. Early lobotomy might have led to better results than the 32 per cent improvement here reported. But as a public hospital, we did not feel it proper to advise so irreversible a procedure in the early stages of a psychosis.

Pre-operative diagnoses: The pre-operative diagnoses were 45 schizophrenia, 1 paranoia, and 8 manic depressive. The schizophrenics included 14 catatonic, 16 paranoid, 4 hebephrenic, 2 chronic undifferentiated, and 9 unclassified. The manic depressives were: 4 manic type, 2 depressed and 2 mixed.

Pre-operative hospitalization period: As indicated in Table 1, most of the patients had been in the hospital many years before lobotomy was recommended. The range was from 1 to 22 years with the median at 4 years. Stay is measured from the current or most recent admission only. Many patients had had previous hospital stays, so the actual time-lag is greater than is reflected in Table 1.

Age: The youngest subject was 17, the oldest was 57. Eighty per cent of the patients were in the 25 to 45 year age bracket.

Sex: Two-thirds of the patients (38 out of the 54) were females. This was due in part to the fact that nearly all the manic-depressives were females (that psychosis is commoner among women) and partly to the fact that, for some strange reason, over-aggressive women seem more disturbing than over-aggressive men. When it comes to assaultive and violent behavior, the female of the human species seems the deadlier.

APPRAISING RESULTS

ONE major controversy about lobotomy concerns the technic of appraising results. All sorts of elaborate yard-sticks have been devised. Numerous tests, scales, rating schedules, check-lists and statistical gimmicks have been offered to answer the question: Did the operation help?

I have used here a simple measuring scale. Patients are divided into five result groups.

Group 1: This is assigned to the patient on prolonged pass with excellent prospects for discharge; or to the patient who has been discharged from our books. There were seven patients in this group.

Group 2: This classification is for patients who have shown substantial improvement, but who have not yet had enough extramural trial to make it clear that they will function consistently well outside the institution. There were also seven patients in this group.

Group 3: A patient who is somewhat easier to get along with in the hospital but who has poor prospects for improvement outside the hospital is placed in group 3. These have not really improved in any professional sense, but they are easier custodial patients. There were 17 in this group.

Group 4: This is for the 22 patients with no significant post-operative change.

Group 5: The one patient who died shortly after the operation is in this group.

Patients in Groups 1 and 2 are considered good results, those in 3 and 4 poor. Good results: 14 cases (26 per cent); poor results: 40 cases (74 per cent). The distinction between "good" and "poor" results is on the basis of the patients' actual or potential ability to adjust to life outside an institution.

Group 1 has already made this adjustment satisfactorily. Group 2 appears to be able to do so if proper outside help from family can be made available. Since both groups come from essentially the same type of environment, the environment cannot be held wholly responsible for group 2's remaining in the hospital. In the Columbia-Greystone study† of a large series of patients, no correlation was found between success of psychosurgery in terms of outside rehabilitation of the patients and good home environment. Actually, results in Group 2 should

† Mettler, Fred, *et al.* Selective Ablation of the Frontal Cortex. New York 1949. Paul B. Hoeber, Inc.

TABLE 1.

Case No. and Sex	Age at Op.	Hosp. In. Years	Date of Operation	Pre Op. Diagnosis	Pre Op. Symptoms	Post Op. Symptoms	Group
1. M	27	4	11-23-48 5-26-49	C. S.	Agg. Ass. Dep. V.	Mus. Dis. Pas.	3
2. F	41	20	11-13-51	C. S.	Agg. Ass. Pro. V.	Less Agg. Ass. V.	3
3. F	27	8	11-13-51	U. S.	Anx. Hal. Irr. Res.	Al. Ch.	1
4. F	23	14	1-17-52	H. S.	Ass. Sil. Dis. Hal.	Hal. Dis.	3
5. M	35	4	1-17-52	P. S.	Del. Hal. Dis.	Unchanged	4
6. F	36	4	3-25-53	U. S.	Agg. Ass. Hos.	Fr. Co. Ins.	2
7. F	31	3	4- 1-53	M. M.	Agg. Ass. Hos.	Ple. Co. Ch.	1
8. F	34	8	4- 8-53	U. S.	Agg. Ass. Sus. V.	D. Sec. Pas.	3
9. M	37	3	4-22-53	P. S.	Del. Hal. Res. Agg.	Unchanged	4
10. F	65	22	4-29-53	Pa.	Per. Del. Gra.	Ple. Co.	1
11. F	44	8	5- 6-53	C. S.	Agg. Ass. Mu. Del.	Rel. Fr. Co.	1
12. F	39	2	5-13-53	P. S.	Agg. Del. Hos. Sus.	Unchanged	4
13. M	35	4	5-20-53	C. S.	Agg. Ass. No. Sil. Res.	Unchanged	4
14. F	41	10	5-27-53	M. D.	Res. Neg. Dep.	Died	5
15. F	56	2	6-10-53	M. X.	Agg. Neg. Unt. Con.	Agg. Inc.	4
16. F	36	1	6-17-53	P. S.	Hos. Del. Pro.	Ple. Fr. Ins.	1
17. M	37	2	6-24-53	P. S.	Agg. Ass. El. Res.	Sul. D. Ind.	2
18. F	27	1	6-10-53	P. S.	Anx. Dep. Hal. Hos.	N. Cl. Fre.	2
19. F	41	7	6-13-53	C. S.	Agg. Ass. Gra. Hal.	Sec. S. Ind.	3
20. F	37	18	6-29-53	C. S.	Agg. N. Sil. Unt. V.	D. Veg.	3
21. F	24	3	8-12-53	U. S.	Res. Sil. V. Ass.	Unchanged	4
22. F	25	6	9-24-53	H. S.	Agg. Ass. Dis. Sil.	Lis. Dis. Ass. Sul.	4
23. F	29	4	9-30-53	C. S.	Agg. Ass. Wit. Sil.	Unchanged	4
24. F	42	1	10- 7-53	M. X.	Agi.Des.Hal.No.Abu.	Co. Ple. Fre.	1
25. F	30	10	11- 4-53	C. S.	Sec.Bel.No.Sus.Ass.	Unchanged	4
26. M	24	3	11-11-53	U. S.	Ass.Agg.Sec.Hos.Sus.	Sus. D. Hal.	3
27. M	31	1	11-19-53	P. S.	Del.Hal.Hom.Hos.Sec.	Unchanged	4
28. F	48	6	11-25-53	M. M.	Ass. No. We. Con. Tal.	No. We. Con. Tal.	3
29. M	38	16	12- 2-53	C. S.	Agg. Ass. V. Sec.	D. Sec. Pas.	3
30. M	27	2	12-30-53	U. S.	Agg. Hos. No. Elo.	D. Pas. Co.	3
31. M	32	2	1- 9-54	P. S.	Agg.Ass.Hal.Res.Elo.	Sus. Sec. Ins.	2
32. F	36	3	1-13-54	M. D.	Neg. Mu. Ass. V. Unc.	Fre. Ch. Ins.	1
33. F	56	3	1-20-54	P. S.	Hal. Sec. Agi. Sus.	Hal. Lis. D.	3
34. M	36	22	1-27-54	C. S.	Agg. Unt. V. Ass.	Co. Fr. Ch.	2
35. F	47	7	2-10-54	M. M.	Hyp. Ass. Del. Agg.	Co. Tal. Rep.	3
36. F	29	6	2-17-54	H. S.	Agg. Ass. No. Del.	Wit. Sec. Sus.	3
37. F	17	3	2-24-54	U. S.	Hos. Ass. Agg. Elo.	Sil. Res.	3
38. M	31	1	3- 3-54	C. S.	Agg. Ass. No.	Ori. Wor. Fr.	2
39. F	52	6	3-31-54	M. M.	Agg. Arg. No.	S. Veg. D.	3
40. F	34	4	4-22-54	P. S.	Del.Hal.Ass.V.Sec.	Unchanged	4
41. M	28	1	4- 9-54	P. S.	Mo.Sec.Unt.Neg.Del.	Unchanged	4
42. M	27	9	5- 5-54	U. S.	Mu. Unt. Neg. Res.	Unchanged	4
43. F	41	8	5-12-54	C. S.	Com.Ass.No.Res.Imp.	Sil. Wit. Sec.	3
44. F	44	1	5-19-54	P. S.	Del. Hal. Sil. Ass.	Hal. Sec. D.	3
45. F	47	7	5-27-54	P. S.	V. Abn. Ass. Neg. Agi.	Unchanged	4
46. F	35	1	6- 9-54	P. S.	Anx. Hal. Sec. Sus.	Unchanged	4
47. M	42	16	6-23-54	C. S.	Ass.Unt.Res.Sec.No.	Unchanged	4
48. M	40	4	6- 7-54	U. S.	Del. Hal. Hos. Dis.	Unchanged	4
49. F	57	3	7-14-54	P. S.	Dis. Fea. We. Unr.	Unchanged	4
50. F	34	8	7-21-54	C. S.	Ass. Unt. Dis. Hal.	Ple. Fr. Res. Sil.	2
51. F	27	6	7-29-54	P. S.	Del.Hal.V.Dis.Ass.	Unchanged	4
52. F	31	5	8- 4-54	H. S.	Neg.Dis.Mu.Sar.Wit.	Unchanged	4
53. F	30	1	8-11-54	U. S.	Ass.Hos.Sus.Hal.	Unchanged	4
54. F	24	1	8-18-54	H. S.	Dis. Sil. Wit.	Unchanged	4

Key to Table 1:

Diagnosis:

S.	Schizophrenia
C.	Catatonic
H.	Hebephrenic
P.	Paranoid
U.	Undifferentiated and unclassified
MM.	Manic Depressive—Manic
MD.	Manic Depressive—Depressed
MX.	Manic Depressive—Mixed
PA.	Paranoia

Key to Symptoms:

Abu.	Abusive	Ins.	Good Insight
Agg.	Aggressive	Irr.	Irrelevant
Agi.	Agitated	Lis.	Listless
Al	Alert	Mo.	Moody
Anx.	Anxious	Mu.	Mute
Arg.	Argumentative	Neg.	Negativistic
Ass.	Assaultive	No.	Noisy
Bel.	Belligerent	Ori.	Oriented
Ch.	Cheerful	Pas.	Passive
Cl.	Clear	Ple.	Pleasant
Co.	Cooperative	Per.	Persecutory
Com.	Combative	Pro.	Profane
Con.	Confused	Res.	Restless
D.	Dull	Sar.	Sarcastic
Del.	Delusional	Sec.	Seclusive
Dep.	Depressed	Sil.	Silly
Des.	Destructive	Sul.	Sullen
Dis.	Disoriented	Sus.	Suspicious
Elo.	Eloper	Tal.	Talkative
Fea.	Fearful	Unc.	Uncooperative
Fr.	Friendly	Unr.	Unresponsive
Gra.	Grandiose	Unt.	Untidy
Hal.	Hallucinatory	V.	Violent
Hom.	Homicidal	Veg.	Vegatative
Hos.	Hostile	We.	Weepy
Hyp.	Hyperactive	Wit.	Withdrawn
Imp.	Impulsive	Wor.	Working

be considered good. This is so for three reasons: First because there really *was* substantial improvement; second because their outlook for extra-mural adjustment is now hopeful; and third because this represents a group of desperately ill patients who, without lobotomy, would have been doomed to a life of disturbed, violent, and forcibly restrained behavior.

In Group 3, results may be considered satisfactory or unsatisfactory depending on the goal. If the goal is to make the patient a better hospital citizen, the lobotomy was a success. But these patients have not otherwise improved and their chances for long-term extra-mural rehabilitation are no better now than before surgery.

In Group 4, results are obviously unsatisfactory. The mortality rate, as reflected by the lone case in group 5, is under 2 per cent and is comparable with that generally reported for lobotomy.

Of the six best results, three were manic-depressives, one was a paranoic and two were schizophrenics. The patient with paranoia had been hospitalized for 22 years prior to psychosurgery. The patients in group 2 were schizophrenics.

Table 1 is discouraging. It suggests that indifferent or poor results are found in 74 per cent of lobotomies. Even at that, however, the operation would appear to be worth considering in patients who are intransigently destructive, who have failed to respond to any other known method, and who are destined to a prolonged, perhaps permanent stay, in wards for destructive patients.

Actually the results are better than those reflected in Table 1. It occurred to me that perhaps some patients with indifferent results would, given enough time, show some improvement. This paper was written in March 1955 and the cut-off date for the study was August 1954. That is, the subjects of this survey are all patients whose lobotomies had been done six months ago or earlier. With one-year instead of a six-month cut-off date, the results are different. This is reflected in Table 2:

TABLE 2.

RESULTS OF LOBOTOMY GROUPED BY TIME SINCE OPERATION

Results		Lobotomy one year ago or earlier	Lobotomy done within past year	Total
Group 1.	Good	6 or 16%	1 or 6%	7 or 12%
Group 2.	Satisfactory	6 or 16%	1 or 6%	7 or 12%
Group 3.	Fair	15 or 40%	2 or 12%	17 or 32%
Group 4.	Poor	9 or 25%	13 or 76%	22 or 42%
Group 5.	Deceased	1 or 3%	0 ——	1 or 2%
		37 or 100%	17 or 100%	54 or 100%

When the one-year-plus group is reviewed it will be seen that satisfactory results developed in 32 per cent of cases, whereas with the more recently operated group, this occurred in only 12 per cent. The most striking difference is in Group 4. Here, it will be noted that poor results occurred in 25 per cent of the older, but in 76 per cent of the more recent group. This difference would be statistically meaningful at a 5 per cent level with as few as 12 cases, and is certainly significant in a group of 22 cases.

The symptoms which were most improved were:

Destructive — Aggressive
Eloping — Untidy
Assaultive — Violent
Uncooperative behavior

CONCLUSIONS

1. If our experience is any criterion, it would appear that lobotomy offers a one-in-three chance of improving such symptoms as aggressive, assaultive and violent behavior, in chronic psychotic patients.

2. This chance exists when the patient has been vigorously treated with electronic and insulin therapies and has failed to show any substantial improvement after years of hospitalization. Presumably, lobotomy would be more effective if done earlier.

3. It may be necessary to wait a year before substantial improvement is manifest.

The author acknowledges the encouragement in launching and concluding this study furnished by Dr. Joseph G. Sutton, Superintendent of the Essex County Overbrook Hospital and the assistance of Dr. Florence Obuchowski, Chief Resident at Overbrook, in assembling the records and compiling the data.

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Tuberculosis is a Sin

"Tuberculosis is not an inescapable component of human society. It is always the result of gross defects in social organization and in the management of individual life. It is a social sin which can and must be stamped out." Rene J. Dubos, Am. Rev. Tuberc., July, 1953.

John A. Olson, M.D.

Cranford

Oral Hydrocortisone* in Muscle Spasm

A hydrocortisone product was found uniquely helpful in relieving acute muscle spasm. Dr. Olson used 60 to 100 milligrams of an oral hydrocortisone as an immediate dose, and then gave six to ten doses of 10 to 20 milligrams each. More than 90 per cent of the patients were substantially helped.

The patient seeking relief of muscle spasm following an acute injury to the neck or low back constitutes one of the major problems of medical practice. His story usually follows these lines: "Yesterday I was riding in the car and there was a draft on the left side of my neck; now I can hardly move it" or "I bent over to pick up a bundle of groceries and something in my back snapped; the pain has been excruciating in spite of using aspirin and the heating pad" or "I did a lot of work in the garden yesterday and this morning when I got up I could hardly move because of pain in my back going down my left leg."

Whether these complaints are diagnosed as sciatica, lumbo-sacral strain, muscle spasm, sacro-iliac strain, or a questionable intervertebral disc syndrome, the initial treatment usually consists of diathermy, the heating pad or analgesia. The patient is often in agony for three or four days or longer before relief is forthcoming. It is doubtful if any of these measures actually relieves the condition although they certainly make the pain more easily tolerated.

Many of the drugs supposed to relieve muscle spasm have been tried with little success. So, because the usefulness of cortisone and hydrocortisone in arthritic joints is probably due to relief of muscle spasm as well as alleviation of inflammation, hydrocortisone was administered orally to a number of these patients.

Method and Results

Initial results using hydrocortisone* were disappointing when the dose was 10 or 20 milligrams every 4 hours. However, good results followed an immediate dose of 60 to 100 milligrams followed by 10 to 20 milligrams every 4 hours (depending upon the size of the patient). After the immediate initial dose, the patients noticed a remarkable relief of pain usually within four hours. When this relief was obtained, the patients were instructed to exercise the affected part moderately. They were told to begin the maintenance dose 4 hours after the initial dose and to continue that for at least 24 hours. If discomfort persisted, they continued the medication beyond that period. No patient required drug therapy longer than 72 hours. None had codeine, narcotics, aspirin or other medication. Some used a heating pad.

A total of 32 patients were treated. All gave a history of acute onset of muscular pain following injury or irritation. Of these, 24 (that is 75 per cent) obtained complete or almost

*The hydrocortisone used was supplied by Pfizer Laboratories as Cortril® through the courtesy of Michael Carlozzi, M.D., Director of Clinical Investigation at Pfizer Laboratories.

complete relief from pain with a marked reduction in spasm four or five hours after the first dose. Many asked: "What was in these pills you gave me?" None were told that the medication was hydrocortisone.* The tablets were handed out in an unlabeled envelope. In some there was a return of the pain after six to eight hours, but its severity was not nearly so great as experienced originally. Usually after an additional 24 to 48 hours on a maintenance dose, the pain and spasm vanished completely without further treatment being required. Of the eight patients who did not get immediate relief from the medication, four were helped, but the results were undramatic. Three (that is 9 per cent) received no apparent aid from the drug, but two of the three had associated emotional problems and their history was less clear regarding the onset of the pain. One patient who obtained the greatest degree of relief after the initial dose developed severe gastric discomfort which recurred immediately after taking additional tablets. In this one case, hydrocortisone treatment was discontinued and the usual conservative measures instituted.

SIDE EFFECTS

No side effects of any kind were noted with the exception of the one patient who suffered some gastric irritation immediately following ingestion of the hydrocortisone. No potassium chloride was administered with the Cortril®. In fact, after using hydrocortisone* where indicated in the treatment of various conditions, side effects have not constituted any particular problem in therapy. Certainly when used for short periods of time, there should be little concern about untoward reactions.

COMMENT

The usefulness of hydrocortisone* in these conditions might be predicated on its anti-inflammatory, analgesic, or anti-spastic attributes. It would seem that the last most suitably explains its effectiveness.

Anti-inflammatory activity has never been a complete explanation for the value of adrenocortical steroids in chronic rhuematoid arthritis nor in osteo-arthritis. Little if any inflammation can be demonstrated in these conditions. Analgesia may be a factor but this fails to explain why narcotics such as codeine relieve much of the pain of muscle spasm, while the spastic condition itself is not improved. No direct analgesic effect of cortisone has been shown [1] in controlled studies.[2] There seems to be some anti-spastic quality inherent in hydrocortisone.* Many patients who complain of stiffness in joints without any particular pain state that their joints feel as though they have had a "grease job" when they take this hormone. They comment on the relief of "tightness and creakiness." This seems to be due to relief of spasm around the joint area.

Each issue of almost every journal describes new uses for hydrocortisone. It is now apparent that its side effects are readily reversible, easily controlled, and—during short term therapy--very rare. There is, therefore no reason why its widespread use cannot be prescribed by the general practitioner. The cost of therapy is a limiting factor in some cases. However, if the doctor outlines the advantages of this medication over usual therapy, the patient is only too glad to meet the expense needed to shorten the period of discomfort.

SUMMARY

1. Muscle spasm following acute injury or irritation is a troublesome every day problem for the practicing physician.

2. Hydrocortisone* was found helpful in these conditions when an initial dose of 60 to 100 milligrams administered at one time was followed by a maintenance dose of 10 to 20 milligrams every four hours for from 24 to 48 hours thereafter.

3. It is thought that hydrocortisone* effects relief by direct anti-spastic effects.

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A New Sulphur Cream for Acne Vulgaris

A preparation of colloidal sulphur in a vanishing cream base was found effective in 161 out of 218 cases of acne vulgaris systematically treated with it.

The commonest skin disease of adolescents of both sexes is acne vulgaris. Text books on dermatology and a constant stream of articles about this disease are unanimous in stating that acne is a stubborn, disabling disease. It leaves not only scars upon the skin, but inflicts damage on the emotional development and social adjustment of young people. One point on which there is little disagreement is the value of sulphur locally applied for the treatment of acne. But differences of opinion do exist on many other aspects of acne vulgaris.

The etiology is unknown, and hundreds of possible causes have been advanced. Some feel that emotional tension (common in an age group of physically adult but emotionally immature individuals) constitutes a basic cause of acne. They reason that sexual urges, which are at their height in the adolescent, are denied satisfactory expression by religious and current social mores. This results in feelings of frustration and anger, which express themselves physically in the form of acne vulgaris. Attention has been called repeatedly by advocates of psychosomatic etiology to the fact that the blemishes appear for the most part on the visible areas of the face—that is, that part of the body which always is presented to the public gaze. Another idea, advanced to explain the frequent facial involvement, reasons that the cheeks and forehead constitute the "flush areas." Flushing and blanching of the face represent expressions of anger, fear, frustration, shame and feelings of inadequacy. The psychosomatists reason that the nutrition of the sebaceous glands is altered by the ebb and flow of the blood in the flush areas, and that this mechanism initiates the lesions of acne vulgaris.

In this connection, we have noticed an interesting phenomenon. During vacation from preparatory schools and colleges many adolescents and post-adolescent patients have reported to us that while at school their acne remained completely controlled, but during the journey home from school a recrudescence of the lesions occurred. We have been able to ascribe this only to the emotional tensions brought on by the anticipation of returning home.

Many dermatologists hesitate to accept emotional factors as a cause of acne. They feel that the emotional disturbances seen in so many cases of acne vulgaris are effects, rather than causes. Endocrine factors, diet, local hygiene, heredity, food allergies, vitamin and nutritional deficiency are also listed as common causes of acne. Estrogens and androgens, as well as pituitary hormones, have all been used in many ways in the treatment of this condition. Androgens have been used in the fe-

male, and estrogens in the male. Results of this treatment have been reported enthusiastically by some authors. Others have been unable to obtain any improvement with them.

Since so many factors apparently may produce acne, it follows that many forms of treatment have been employed. In personal communication with 12 local dermatologists, we learned that the one basic therapy which all of them used was sulphur locally. Methods of employing the sulphur varied widely, but the entire group of dermatologists felt that this ancient remedy was the one with the widest application. Eight of the twelve used x-ray therapy in conjunction with sulphur. Two used no x-ray. One did not use sulphur and x-ray together, although he did not object to using them at different times.

Since sulphur seems to constitute a basic therapy of acne, we decided to test a new sulphur cream [1] on an unselected group of acne cases. These patients were drawn largely from the private practices of the authors. Other therapy was given in accordance with the findings in the individual case. Some received x-ray therapy, while others were exposed to ultraviolet light. All were given elimination diets excluding foods thought to cause or aggravate acne. Some received vitamins, including Vitamin A, Vitamin B-Complex, Vitamin B-12. Others were given injections of staphylococcus toxoid, and others had short courses of antibiotics during the pustular stages. One group of females, who complained of aggravation of acne during the menstrual period, was given anterior pituitary-like hormone. In all cases, concomitant seborrhea capitis was treated when present. The same test cream was used on the scalp in one group of patients with concomitant seborrhea capitis.

The test periods extended over all four seasons to rule out the possibility that improvement obtained could be ascribed only to the summer sun. Most of the patients were seen at intervals of 5 to 14 days.

Each patient was given a tube of cream and a cake of Thylox Sulphur [2] soap. The tube contained colloidal sulphur in a vanishing cream base. No pigments were used in the cream so that it could be used by males as well as females. The cream was rubbed in at least once daily after thoroughly washing the face with Thylox [1] soap. The cream is mildly scented, and there is no objectionable sulphur odor. Some of the females were permitted to apply their usual make-up over the cream. Other modalities were used in conjunction with the soap and cream where indicated. Average duration of treatment was three months. The ages of the patients ranged from 8 to 53 years, most being between the ages of 12 and 27. The total number of cases treated was 218. Of these, 46 were classified as mild, 103 as moderately severe, and 69 as severe; 150 patients were females, and 68 were males. The severe cases were those with widespread involvement and with deep pustular and cystic lesions. Treatment results were classified as improved, aggravated, and no change. After an average treatment period of three months, 161 patients, (74 per cent) were improved; 11 cases (5 per cent) became worse under treatment. It was not felt in these cases that the aggravation was caused by treatment. Spontaneous aggravation does occur in acne in spite of any treatment used. Forty patients (18 per cent) showed no improvement, while 6 of the patients (3 per cent) were found to be sensitive to all forms of sulphur and therapy had to be discontinued. It is possible that some of these patients might have been continued on sulphur if it had been used less frequently, but for the purpose of this study, it was deemed advisable to discontinue treatment in the sensitive cases.

A new colloidal sulphur cream [1] was used on 218 patients with acne vulgaris. Many also received other forms of treatment. The results were:

Acne aggravated	5 per cent
Treatment discontinued [3]	3 per cent
No change	18 per cent
Definitely improved	74 per cent

It is believed that this cream and soap are valuable adjuncts in the treatment of acne vulgaris.

1. Thylox Sulphur Cream—Shulton Laboratories. Its formula is: 4% thylox sulphur, 0.5% hexachlorophene (G-11) and 10% alcohol in hydrophilic ointment USP.
2. Shulton Laboratories, Clifton, N. J.
3. Because of sulphur sensitivity.

15 Washington Street (Dr. James)

Louis F. Raymond, M.D.
East Orange

Reversible Chronic Recurrent Keratitis With Vascularization Due to Ariboflavinosis

Dramatic "cure" of a persistent ariboflavinosis is reported when dietetic errors were corrected and riboflavin administered. The corneal vascularization also disappeared.

Sorsby [1] states that the pathology of a riboflavin deficiency begins by circumcorneal injection. The limbal vessels proliferate and anastomose to form loops and arcades. This process extends until the cornea is invaded with capillary twigs and loops. It is believed that riboflavin deficiency is a multiple deficiency. It is not unusual, however, to have uncomplicated deficiencies of riboflavin. Diagnosis, as with all deficiency diseases, depends on a dietary history, the signs of deficiency and the effect of replacement therapy. The following case meets these criteria.

A male adult had a history of a recurrent red eye dating back to his army service in 1944. He had two similar attacks in the right eye in 1953, and reports a similar attack in the right eye in 1952.

Vision in the right eye: 20/30. In the left, vision was: 20/50. Slit lamp examination showed active corneal vascularization in the left eye with multiple vascular loops, the limbal vessels proliferating across the entire lower half of the corneal surface joining vascular loops at the opposite side from the nasal to the temporal side in a ribbon-like fashion.

The patient gave a history of eating an excessive amount of candy. "I could eat a box of candy without stopping in a half hour."

Treatment consisted of atropine and cortisone locally plus 30 milligrams of riboflavin a day. Response was dramatic. In exactly three weeks the vascular loops receded and the corneal vessels became atrophic. The patient was discharged in one month. Periodic observation showed that the vascular loops had receded completely. Slit lamp showed only remnants of the old atrophic vessels.

He had a recurring episode several months later. This was traced to a change in the diet. After discontinuing the candy and refined carbohydrates from the diet and after renewed therapy with riboflavin, the patient again made a dramatic recovery. Slit lamp showed atrophic vessels in the cornea and the receding of the vascular loops at the limbus. There was present, however, an old corneal leukoma.

Berens [2] states that chronic lack of vitamin B_2 or riboflavin is related to superficial corneal vascularization and scarring. This corneal disease may appear in the apparently well nourished. Large daily intravenous doses of riboflavin are necessary for long periods of time for healing. This may be due to the fact that the dietary deficiency has not been corrected and indiscretions in the diet, such as illustrated in this case, have not been corrected. The apparent "quick cure" in this case resulted from a correction of the diet and the addition of riboflavin.

Riboflavin is first ingested and phosphorylated by the intestinal mucosal enzymes before absorption. Riboflavin is linked to many enzyme systems of the body. It seems to be a

1. Sorsby, Arnold: *Systemic Ophthalmology*, Mosby, St. Louis, 1951, p. 329-330.
2. Berens, Conrad: *The Eye and Its Diseases*, Saunders, Philadelphia, 1949, p. 117.

necessary part of biologic oxidation-reduction reactions. In this role, riboflavin in the form of mono and dinucleotides acts as the prosthetic group (co-enzyme) necessary in the passing of hydrogen ions between the tissues. In this manner riboflavin is necessary in the tissue respiration through various oxidase and enzyme systems.

In the tissues riboflavin [3] is considered to be a "carrier" connecting the pyridine nucleotides with the cytochromes. These "carriers" are protein compounds, containing, as prosthetic groups, alloxazine mononucleotide (riboflavin phosphate). The alloxazine mononucleotide or riboflavin phosphate, together with a protein, has also been called Warburg's "yellow enzyme." Close connection between the vitamin, riboflavin, to the "yellow enzymes" has been shown by creation of a riboflavin deficiency in rats and by noting a decrease in the d-amino acid oxidase of the liver and kidney. The addition of riboflavin to the diet increases the enzyme content of the tissues.

Riboflavin may be obtained in the form of orange-yellow crystals which are soluble in water. The greenish-yellow solution has a greenish-yellow fluorescence. Both riboflavin and the "yellow enzyme" show characteristic absorption bands.

Present nutritional studies cannot specifically account for the biochemical explanation of riboflavin in the biologic oxidation of carbohydrates. Biochemical studies definitely do link riboflavin (vitamin B_2) with tissue respiration through various oxidases and enzyme systems.

This patient shows a recurrence over ten years. Treatment previously consisted of local medication and chemical cauterization. This treatment implies that the condition was due to an infection rather than to a nutritional etiology.

SUMMARY

A CASE of chronic ariboflavinosis of ten years' duration is reported whereby correction of dietary errors plus riboflavin resulted in an apparent cure. Clinical picture upon discharge showed a disappearance of corneal vascularization. The slit lamp showed the blood vessels to be atrophic centrally. Limbally no vascular loops were present.

3. Harrow, Benjamin: *Textbook of Biochemistry*, Saunders, Philadelphia, 1944, p. 375-376, 164.

719 Park Avenue

Atabrine Effective Against Petit Mal Attacks

The antimalarial drug Atabrine effectively combats petit mal attacks in epilepsy, it is reported in the *New England Journal of Medicine* (251:897, 1954).

Drs. Douglas T. Davidson and Cesare Lombroso of the Harvard Medical School note that Atabrine was useful against petit mal seizures, either alone or in combination with convulsions. Most patients in the series had failed to respond to other methods of treatment. The antimalarial was administered in 0.1 Gram tablets, in dosages ranging from 0.1 to 0.4 Gram a day.

Most clinicians concede that whatever drug to be used for epilepsy must be tailored to each patient's variation in tolerance and need for medication. Effects of full doses of the least toxic drug should be tested first and the drug withdrawn if therapy proves unsuccessful. When one drug used singly fails, seizure control is often achieved by a combination of drugs in full dosage. Davidson and Lombroso caution against sudden withdrawal of effective medication as likely to trigger a series of seizures.

Robert B. Marin, M.D.
Montclair

Dietary Adjustment in Gall Bladder Disease

In these days of surgery, antibiotics and wonder drugs, we sometimes forget the role of diet. It is still true, however, that nothing can come out of man except what went into him. In this short but cogent article, Dr. Marin points up one aspect of modern dietotherapy.

The act of eating being variously a pleasure, a necessity and a curse is no more intimately related or more personal than to the victim of gall bladder disease. As far as is now known, diet cannot prevent stone formation, dissolve existing concretions, deter infection or cure a chronically inflamed gall bladder. What the patient eats, however, does influence bile flow, smooth muscle function and, therefore, the adequacy of drainage.

Abdominal discomfort associated with gall bladder disease can be greatly reduced by dietary control. Non-surgical gall bladder infections (where the liver is frequently involved) call for a carefully planned diet regime. In elective gall bladder surgery, the surgical risk can be greatly reduced by a routine nutritional buildup preceding and following operative procedures. Protein depletion may delay wound healing with associated edema of the gastric and intestinal stomas. A positive nitrogen balance is therefore of vital importance in successful gall bladder surgery.

In the post-operative gall bladder, diet should provide complete proteins up to 125 to 150 Grams per day. Notwithstanding the excellence of the amino acid preparations, the oral intake of protein foods is still the best method of nutritional provision. Usually within 48 hours following surgery, the patient is ready for a diet of lean meat, lean fish, Jel'o® and cottage cheese. Milk is poorly tolerated by many people and may cause abdominal distention. It is well to build the dietary regime of the surgical patient rapidly wthin personal tolerance, and a diet of two to three thousand calories per day including at least 150 Grams of protein with ample vitamins can routinely be achieved within the usual hospital stay of ten to fourteen days. All are generally agreed that adequate nutrition expedites recovery and sharply reduces postoperative complications.

In acute cholecystitis, diet though sharply limited and usually supplemented by the intravenous control of fluid balance is, nevertheless, important and of a physical and psychologic value. Least irritating are skim milk, hot tea, sugar water, cereals, Jello®, canned baby foods, baked potatoes, boiled rice and small amounts of stewed fruits. Egg white furnishes an excellent source of nutritional value but egg yolk, producing gall bladder contractions, is contraindicated in the presence of pain.

In chronic cholecystitis where surgery is not performed, the patient must be trained both in food selection and in proper eating habits. Five feedings a day should be routinely used in place of the usual three. The quality and

preparation of the food need careful supervision. In general, fat meat, such as pork and sausage and fatty fish, are undesirable. Fried foods, highly spiced delicatessen meats and breaded meats should be avoided. The low fat content of the diet may produce insufficient intake of fat soluble vitamins. With a correspondingly higher carbohydrate content intake, the need for vitamin B complex as well as other special vitamin preparations is evident. In some cases (particularly where the contractability of the gall bladder is not mechanically impaired) a low cholesterol intake may be desired. Jenkinson, in 1936, pointed out that under certain conditions, patients suffering with cholecystitis benefitted from a high fat diet in association with dehydrocholic acid. The "shotgun effect" of this combination in gall bladder emptying is desirable only after careful gall bladder investigation. The presence of stones as well as the fat tolerance of the individual patient are determining factors.

Wisely and judiciously used in both the surgical and non-surgical gall bladder approach, diet plays a determining role in resistance, recovery and repair. As far as is now known, we can neither eat our way into gall stones nor eat our way out. The possibility that this millenium may occur in the future may have a soul-shaking effect on medicine. Nevertheless, the gourmet, and frequently the gall bladder sufferer, will still have to be approached on a practical basis. Food habits will have to be changed, psychic factors overcome, living routine restyled and digestive capacity of the patient attuned to the disease process.

85 Park Street

The Bald One: Man of the Future

The first known written medical record contained a remedy for baldness, including fat from the lion, hippopotamus, crocodile, goose, serpent, and ibex. It had one thing in common with modern "cures."

It failed to cure baldness.

One of the reasons baldness "cures" have continued to appear for thousands of years is that baldness is a "mysterious condition about which people can be easily fooled," according to Veronica L. Conley, assistant secretary of the American Medical Association Committee on Cosmetics. The "pseudoscientific arguments supporting most baldness cures are frequently so convincing that their unsound basis can be detected only by scientists."*

For instance, "before and after" pictures of bald men whose hair grew again after using a "restorer" are among "the most potent advertising weapons." But in many types of baldness, hair will return regardless of treatment or lack of it. This type of baldness and spontaneous regrowth often follow infectious diseases accompanied by fever, including erysipelas, pneumonia, typhoid, and influenza. Serious hair loss sometimes follows childbirth or surgery. In these conditions, normal hair growth returns without help.

But for ordinary baldness, massage and hair tonics with or without vitamins, hormones, ultraviolet light, diets, sulfa drugs, and antiseptics have no special place in treatment. A complete physical examination to discover a possible cause in disease is wise. Regular and gentle scalp massage, brushing, and intermittent tugging at the hair to lift the scalp are "measures for good scalp hygiene."

However, once ordinary baldness gets under way, "it is progressive and permanent and there is no known way of preventing or retarding its progress," Mrs. Conley said. The tendency toward baldness is hereditary but will appear only where there is a normal amount of male hormone.

Scientists are mostly optimistic about an eventual solution to the problem of baldness, except for one factor.

"In the course of evolution there has been a marked reduction in the amount of hair covering the human body," she said. "The loss of scalp hair may be part of an evolutionary trend. If this is true, future centuries will bring not a cure but the appearance of more and more bald men."

*Paraphrased from January 1955 *Today's Health.*

Trustees' Meetings

April 16, 1955

A regular meeting of the Board of Trustees was held in Atlantic City on April 16, 1955. At that meeting, the Trustees took the following actions:

—Referred to the House of Delegates a Woman's Auxiliary resolution requesting that the Society establish a "Medical Students Loan Fund."

—Referred to the House of Delegates a resolution re-affirming the Society's condemnation of the assessment of staff physicians by hospitals.

—Approved and referred to the House the following names for election to the Board of Governors of the Medical Service Administrations: Messrs. Lunn and Thompson; Drs. Comando, Costello, Schaaf, Schretzmann, Sprague and White.

—Approved and referred to the House, the following nominations to the Board of Trustees of Medical-Surgical Plan: Messrs. Withers, Lunn and Thompson; Drs. Barkhorn, Borsher, Comando, Corrigan, Costello, Donnelly, Echikson, Keating, Mecray, Schaaf, Schretzmann, Sprague and White.

—Accepted the invitation of the State Health Department for this Society to be a cooperating agency in connection with a fluoridation exhibit in the State Museum.

—Ratified the action of President Lance in making available to the State Commissioner of Education our Criteria for Specialist Consultants, for the Commissioner's use in approving medical examiners for the classification of handicapped children.

—Authorized the chairman to name a committee to discuss with the New Jersey Bell Telephone Company a protest from the Monmouth County Medical Society concerning the division of Monmouth County into three separate classified telephone directory listings. Drs. Greifinger, Lance and Mulligan will constitute this committee.

—Authorized the Chairman of the School Health Committee to attend a Conference on Physicians and the Schools in Illinois in October.

—Pledged support for the furtherance of the poliomyelitis immunization program in New Jersey.

—Authorized employment of Mr. Charles F. Church as Assistant to the Executive Officer.

—Received and accepted the report of the Treasurer.

—Authorized the drafting of a special resolution commemorating Dr. David W. Green's many services to The Medical Society of New Jersey.

—Discussed the problem of discontinuation and cancellations of Hospital Service Plan contracts and voted to ask the physician-members of the Board of Trustees to investigate grievances based on cancellation of contracts.

—Instructed the Chairman of the Woman's Auxiliary Advisory Committee to discuss with Auxiliary officials the suggestion of establishing a "Doctor's Day" on the anniversary of the founding of The Medical Society of New Jersey.

April 20, 1955

The reorganization meeting of the Board of Trustees was held in Atlantic City on April 20, 1955. President Butler presided for the election of permanent officers of the Board for 1955-56. Dr. Byron Blaisdell was re-elected Chairman of the Board. Dr. Reuben Sharp was re-elected as Secretary of the Board for 1955-56.

In accordance with Article IX, Section 2, "No member shall be eligible to more than one office at the same time . . . ," Dr. Kenneth E. Gardner, newly elected 2nd Vice-President, submitted his resignation as Councilor for the First District. Dr. F. C. Bowers was elected to fill the vacancy.

The salaried personnel of the Society's staff were reappointed at the salaries provided in the 1955-56 budget.

Dr. Costello was re-elected as Board member of the Finance and Budget Committee for a term of six years.

The Board directed that the following memorial to Dr. Ralph K. Hollinshed, Fellow, be spread upon the minutes of this meeting, that a copy be forwarded to Dr. Hollinshed in

the name of the House of Delegates, and that the text also appear in the official proceedings of the House of Delegates in accordance with the action of the House at its last session.

WHEREAS, Doctor Ralph King Hollinshed of Westville has for forty-six years been a member in good standing of The Medical Society of New Jersey, and

WHEREAS, through all these years he has rendered to it distinguished and valuable services, and

WHEREAS, in 1943, as President of The Medical Society of New Jersey, by his gifted leadership he added new luster to the name of the Society, and

WHEREAS, now, in his seventieth year, he has been admitted to Emeritus Membership, therefore

BE IT RESOLVED, that The Medical Society of New Jersey through its House of Delegates hereby acknowledges its profound indebtedness to and deep affection for Doctor Hollinshed for the example and profit of his life to his fellow physicians and to all mankind.

The Board thanked the staff members for their efficient services rendered in connection with the convention, and authorized an honorarium of one week's salary to the convention staff.

A vote of thanks was sent to Dr. Kaufman and his Annual Meeting Committee for the successful scientific portion of the convention.

A letter of thanks was voted to the management of The Ambassador for its cooperation and service, which contributed so largely to the success of the convention.

Dr. Sica reported he had been instructed by the Mercer County Medical Society to protest the action taken by the House of Delegates on the apportionment of fees.

Bicillin in the Treatment of Syphilis

Preliminary evaluation by the U. S. Department of Health, Education and Welfare, suggests that a single injection of 2,400,000 units of benzathine penicillin G (Bicillin) should prove adequate as a routine schedule for certain stages of syphilis. It is believed that this amount is sufficient not only for early infectious syphilis but also for latent, osseous, gummatous, and cardiovascular syphilis.

For neurosyphilis it might be advisable to repeat this dosage at weekly intervals to a total of no more than 9,600,000 units. Although no data are available on results of benzathine penicillin G (Bicillin) in the treatment of symptomatic neurosyphilis, evaluations of other types of penicillin preparations indicate that the larger dosages may have a slight advantage.

For congenital syphilis it is suggested that those under two years be given half the adult dose and that those over two years be given the full adult dose suggested for comparable manifestations of acquired syphilis.

The Bureau of Venereal Disease Control of the New Jersey State Department of Health distributes without charge to private physicians either procaine penicillin G in oil with 2 per cent aluminum monostearate or benzathine penicillin G (Bicillin) for the treatment of syphilis, as requested on the back of the morbidity report card.

Age Distribution in Tuberculosis

There has been a striking change in the tuberculosis picture over the past 25 years. A marked shift from female to male and also towards the older age groups both regarding morbidity and mortality has occurred. Tuberculosis is becoming increasingly a disease of people over 50 years of age and especially is this so in respect to males. C. C. Brink, M.D., Canadian J. Pub. Health, May, 1954.

Obituaries • • •

DR. ILY R. BEIR

Atlantic City lost one of its senior otolaryngologists on April 11, 1955 with the death that day of Dr. Ily R. Beir. Dr. Beir was born in 1879 and was graduated from the University of Pennsylvania School of Medicine in 1902. Shortly thereafter he came to Atlantic City and was appointed to the ear, nose and throat service of the Atlantic City Hospital. He was active in Masonic and church affairs, and also in his alumni association.

DR. JOHN G. HAWLEY

Dr. John G. Hawley died at the Englewood Hospital on February 22, 1955. Dr. Hawley was born in Chicago in 1920 and was graduated from the College of Physicians and Surgeons, Columbia University in 1948. After serving in the Navy and at the Presbyterian Hospital in New York City, he came to Tenafly, N. J., where he opened an office limited to the practice of internal medicine. Dr. Hawley was a member of Alpha Omega Alpha.

DR. MELVILLE G. KILBORN

Dr. Melville G. Kilborn, attending anesthesiologist at the Orange Memorial Hospital, died on April 5, 1955 at his home in Livingston. Born in West Orange in 1904, Dr. Kilborn was graduated from the Jefferson Medical College in 1930. He interned at the Orange Memorial Hospital and took a residency in anesthesiology at the Lahey Clinic. He was an amateur radio enthusiast and had a private "ham" station. Dr. Kilborn was a lieutenant colonel in the reserve.

DR. JOSEPH A. MACLAY

Dr. Joseph A. Maclay, a life-long resident of Paterson, died in that city on March 27, 1955 at the age of 76. A graduate of the Jefferson Medical College, class of 1902, he served in the Army in World War I, as a captain in the medical corps. A general practitioner with special interest in surgery, Dr. Maclay was a Fellow of the American College of Surgeons. He was one of the founders of the Valley Hospital in Ridgewood.

DR. THOMAS P. McCONAGHY

A south Jersey leader in medical, artistic and Masonic circles died on March 18, 1955 with the passing of Dr. Thomas P. McConaghy. Born in Camden in 1900, Dr. McConaghy was graduated in 1925 from the Temple University School of Medicine. After interning in Atlantic City Hospital, he established his office in Camden. A founder of the World Medical Association, Dr. McConaghy was known as an artist of professional caliber. He was also active in Masonry and in many civic associations. He was, in 1950, President of the New Jersey Society for Physical Medicine and Rehabilitation.

DR. JOHN L. OPFERMAN

One of Monmouth County's oldest residents died on March 18, 1955 with the passing on that date of Dr. John L. Opferman. Born in Englishtown in 1876, Dr. Opferman was graduated from Baltimore College of Physicians and Surgeons in 1904 and moved to Highlands, N. J. that year. He remained a citizen of that community for half a century and was twice mayor of the town. For over 30 years Dr. Opferman served on the Board of Education. He was also vice-president of the New Jersey Trust Company of Long Branch.

DR. BRISCOE B. RANSON, JR.

A past-president of the Essex County Medical Society, Dr. Briscoe B. Ranson, Jr. died on March 26, 1955 after a long illness. Born in West Virginia in 1877, he attended the medical school of the University of Maryland, from which he was graduated in 1902. After interning at the Orange Memorial Hospital, he found he liked New Jersey and settled in Maplewood. At first a general practitioner, Dr. Ranson developed increasing interest in surgery, and eventually became senior surgeon to, later chief of staff at the Orange Memorial Hospital. He was a Fellow of the American College of Surgeons and consulting surgeon to the Essex Mountain Sanatorium.

In the April 7 issue of the Maplewood News-Record, a tribute to Dr. Ranson was published in the "Music Notes" column. Dr. Ransom was characterized as one who had faith in himself and his work and the faculty of inspiring others to be constructive.

Authors' Clinic • • •

Hyphens, Prefixes and Compound Words

When in doubt, avoid hyphens. It is generally better to consolidate the prefix with the noun (as: postwar, pseudohypertrophic, and so forth) than to use a hyphen. However, insert a hyphen to connect the prefix under three circumstances: (1) If the main word is capitalized, as "un-American"; (2) If the prefix ends and the main word begins with *the same* consonant as "post-traumatic"; or (3) If the prefix ends and the main words begins with a vowel, as "contra-indication," "radio-activity." To join two independent words hyphens are used (4) if both words are personal names, referring to different persons, as Binet-Simon, Stokes-Adams or (5) If necessary to avoid confusion of meaning, as "well-being" or "after-effects." Thus we write "all-important principles" since the word "all" refers to the adjective not to the noun and the phrase "all important principles" has an entirely different meaning from "all-important principles."

PREFIXES

Use a hyphen if the combination comes under one of the rules above. Otherwise join the prefix with the main word, thus endoderm, entameba, semiprivate, postmortem, pseudohypertrophic, counteract, postoperative (but *pre-operative* because of the double vowel), hyperthyroidism (but *hypo-ovarian* because of the double vowel), suprascapular, subacromial, and so forth. If a single capital letter constitutes the prefix, this stands by itself without a hyphen, as T shaped, H antigen or X factor. Sometimes the prefix has become permanently fused with the main word to form a generally accepted word by itself. No one now writes re-act, co-operate or sub-ordinate, for instance. The prefix is part of the word.

WORD COMPOUNDS

A word phrase may be written in three forms: (a) by fusing the words, as "eyeball" or "gallstone"; (b) by writing them as separate words, as "ear drum" or "cod liver oil;" or (c) by connecting them with a hyphen. The hyphen is rarely used to yoke independent words—see paragraph above. The general rule is that if each word by itself has the same meaning individually that it has within the phrase, the words are written separately. Thus since otologists speak freely of "the drum," the phrase *"ear drum"* is written as two separate words. This accounts for such phrases as "foot drop," "ice bag" and "pulse rate" where, within the phrase, each word retains its individual meaning. On the other hand, practitioners do not speak simply of the "ball' meaning the "eyeball." Hence "eyeball" is written as a single consolidated word since "ball" by itself does not mean eyeball. The word "bite" does not have its usual meaning in the compound word "frostbite," and the marks of smallpox are not necessarily smaller than the lesions of the great pox. Therefore frostbite and smallpox are written in each instance as a single consolidated word. Since "feeble" generally has a physical connotation which is not how it is used in the compound form "feebleminded." this is written as a single word. "Gall bladder" appears as two words because each part of it, "gall" and "bladder" is used in its individual sense; but "outpatient" is written as one word because "out" in this word does not have the usual meaning of "out." Unfortunately the rule is not consistently followed because the historical tendency in English is to fuse words as the compounds gain acceptance; when a compound has long been used in unitary sense, the words are consolidated even though according to this rule they could be written as separate words. Thus "background" has become an acceptable English word by itself and is so written. If one of the words is used in a figurative or allegorical sense (as clubfoot, stillborn, quicksilver, and harelip), the phrase is written as a single word. If the first word is used in an adjectival (that is, modifying) sense, the phrase is usually written as a single word. That is why we write gallstones but "gall bladder." The same reasoning accounts for the fusion of "wry" with "neck" in "wryneck," and also explains such compound words as "stopcock" where the first word is used in an adjectival sense different from its ordinary English use.

The following list reflects acceptable usage for many common compounds. If a specific phrase is not included, be guided by the "Table

of Practices" below. When in doubt, write the phrase as two separate words without a hyphen. It is easier for the editor to yoke them or insert a hyphen than for him to pry them apart or erase a hyphen.

The numeral following each word refers to the corresponding paragraph of the "Table of Practices for Compounding Words" in the next column.

after-effects 5
airway 11
amino acid 8
antitoxin 3
Argyll-Robertson 12
auto-intoxication 1
background 7
Bence-Jones 12
Binet-Simon 4
birth rate 8
blindspot 11
blood cells 8
bow legs 8
cannot 7
cardiovascular 7
cerebrospinal 7
chickenpox 9
childbirth 9
clubfoot 10
cod liver oil 8
contra-indicate 1
counteract 3
ear drum 8
endoderm 3
entameba 3
eyeball 9
feebleminded 9
footdrop 8
frostbite 9
gall bladder 8
gallstone 11
harelip 10
hay fever 8
heart block 8
hydrotherapy 3
hyperthyroid 3
hypo-acidity 1
hypothyroid 3
ice bag 8
intravenous 3
Laurence-Moon-Biedl 4
lymphogranuloma 3
medico-legal 15
micro-organism 1
midbrain 10
narco-analysis 1
narcosynthesis 3
naso-lacrimal 15
newborn 10
no one 8
osteo-arthritis 1
outpatient 11
P wave 6
per cent 8
perinephric 3
poison ivy 8
postmortem 3
postoperative 3
post-traumatic 2
postwar 3
pre-operative 1
president-elect 13
pseudohypertrophic 3
pulse rate 8
radio-activity 1
red blood cells 8
sacro-iliac 1 and 15
semiprivate 3
smallpox 9
so called 8
some one 8
stillborn 10
stopcock 11
subacromial 3
surgeon general 13
symptom complex 8
Stokes-Adams 4
T shaped 6
tabo-paresis 15
toe nail 8
transatlantic 7
ultraviolet 3
van Gieson's stain 12
vasomotor 3
wave length 8
well-being 5
wrist drop 8
wryneck 11
X factor 6

Table of Practices for Compounding Words

1. If the prefix ends, and the main word begins with a vowel, use a hyphen. (radio-activity)

2. If the prefix ends with a consonant and the main word begins with the *same* consonant, use a hyphen. (post-traumatic)

3. A prefix which is not in itself a word, is joined to the word following (unless rules 1, 2 or 15 apply). (pseudohypertrophic, ultraviolet, postwar).

4. Separate personal names are joined by hyphens. (Stokes-Adams, Binet-Simon).

5. Hyphens may be used to prevent confusion or misunderstanding. (well-being).

6. A single capital letter is treated as an independent word. (P wave, T shaped)

7. A compound which has become an integral part of the general English vocabulary is written as a single word. (background, cannot).

8. If each word has the same meaning individually that it has within the phrase, it is written as a series of independent words. (cod liver oil, ear drum, pulse rate).

9. If one of the words standing by itself would have a meaning somewhat different from its meaning in the phrase, the compound is fused into a single word. (feebleminded, frostbite).

10. If the first half of the compound is used in an allegoric or figurative sense, the phrase is written as a single word. (stillborn, harelip, quicksilver).

11. If the first word is used in a modifying sense which it does not have when standing by itself, the phrase is a single word. (wryneck, outpatient).

12. In a double personal name, the form used by the person concerned, is followed. Douglas Argyll-Robertson wrote his name with a hyphen as did Henry Bence-Jones, whereas Karl van Gieson did not use the hyphen. Hence "van Gieson's stain" but "Bence-Jones protein."

13. Official titles follow the rule laid down by the organization concerned. This Medical Society's constitution uses the form President-elect, hence the hyphen is preserved; but the Army writes Surgeon General without the hyphen.

14. Compound chemicals may be hyphenated to show their composition. (Methyl-phenyl-hydroxy-quinoline).

15. If the first half of a compound word has been artificially constructed by changing its last syllable to "-o," a hyphen is used. Thus the first half of "medico-legal" is a synthetic word: that is, there is no such word as "medico." Hence "naso-lacrimal," "tabo-paresis," and the like. The words "cerebrospinal" and "cardiovascular" might logically come under this paragraph except that by now they have become entrenched completely into the language, so that paragraph 7 applies.

HENRY A. DAVIDSON, M.D.

County Society Reports • • •

Atlantic

The regular meeting of the *Medical Society of Atlantic County* was held at the Children's Seashore House, April 15, the president, Dr. Matthew Molitch, presiding.

The scientific program was presented by Henry P. Royster, M.D., Professor of Clinical Surgery at the University of Pennsylvania. His topic was the "Modern Treatment of Burns."

The business meeting was opened by the approval of the minutes of the previous meeting as published in the *Bulletin*. On motion of Dr. Anthony Merendino, Herbert Fisher, M.D., and George C. Godfrey, M.D. were promoted from associate to regular membership; and the election by transfer of Dr. Harry Brunt to regular membership was unanimously approved.

Dr. Samuel Diskan recommended that the Society have a formal induction and recognition of all new and elevated members. The Secretary said he would mention this in the letter to future new members. They will be asked to attend the next meeting so such recognition may be made.

Dr. James F. Gleason, reporting for the Insurance Committee, notified the Society that there is now a period for enrollment in the Blue Cross for all members who have not previously joined.

Dr. David Allman emphasized the importance of a good registration of our Society at the State Convention and the A.M.A. Convention.

The Secretary, reporting for Dr. Jay Mishler, stated that there is only one more meeting before June, when all who have not paid dues for 1955 will be dropped from membership in the county and state Societies. This will also make such members ineligible to hold staff position in most of the hospitals in the county.

Dr. Leonard Erber reported that twenty-five emergency calls were handled during the month of March.

The following resolution was read by Dr. Erber:

WHEREAS God, in His infinite mercy, has taken from our midst Dr. Ily R. Beir, and

WHEREAS Dr. Ily R. Beir was graduated from the University of Pennsylvania in 1902, a member of the General Alumni Society and the University of Pennsylvania Club of this city, and

WHEREAS he was on the staff of the Atlantic City Hospital where he devoted many hours of arduous and devoted service to his patients, and

WHEREAS he was a member of this Medical Society of Atlantic County, of the New Jersey State Medical Society, and of the American Medical Association, and

WHEREAS he was active in social, charitable, religious and communal affairs of our city, and

WHEREAS he was a devoted husband and father to his family, now therefore,

BE IT RESOLVED that the Medical Society of Atlantic County express its sorrow and extend its sympathy to the family of the bereaved, and that these resolutions be spread upon our minutes and a copy be sent to his family.

The Society observed a silent period in honor of Dr. Beir.

Dr. Molitch appointed Dr. Hilton S. Read, Dr. Milton Ackerman, Dr. F. Sterling Brown, Dr. Anthony G. Merendino and Dr. E. Harrison Nickman as a Nominating Committee. Drs. Weintrob and Naame were named to the Auditing Committee.

The meeting was then adjourned and the members enjoyed a fine musical program presented by Miss Marjorie Hamilton, Mr. Frank Sanders, Dr. Frederick Erskine and Dr. Anthony Merendino, known as the "Musical Combo of Doctors."

Refreshments were served, compliments of the *Bulletin*.

LEONARD B. ERBER, M.D.
Reporter

Cumberland

The Kimble Glass Division of the Owens Illinois Glass Co., Vineland, were hosts to the *Cumberland County Medical Society* for their regular meeting on April 12 with Dr. Frank J. T. Aitken presiding. The annual election resulted in the following:

President — Dr. Nicholas Marchione, Vineland; Vice-President — Dr. Sherman Garrison, Bridgeton; Treasurer — Dr. Samuel B. Pole, 3rd, Bridgeton; Reporter — Dr. Paul Ayars, Port Norris.

Elected to Executive Board for one year:

Dr. Jesse Carll, Bridgeton; Dr. Robert A. Levenson, Vineland; Dr. Alfred O. Davies, Millville.

Judicial Committee — Dr. Benjamin Berkowitz, Bridgeton.

District Judicial Council—Dr. Frank J. T. Aitken.

The following active members were honored with Emeritus Memberships in the County Society:

Dr. Hugh W. Baker, Vineland; Dr. G. A. Davies, Elmer; Dr. A. G. Sheppard, Elmer.

Drs. Fred D. Snyder, Jr. and William S. Fithian, 3rd, were elected to full membership.

After a highly successful year in office, President Aitken turned the gavel over to Dr. Marchione who conducted the remainder of the meeting.

Dr. George I. Blumstein, Assistant Professor of Medicine, Temple University Medical School, then spoke on "Bronchial and Cardiac Asthma."

Following the scientific session an excellent supper was served through the courtesy of the professional staff and personnel department of the Kimble Glass Company.

BENJAMIN BERKOWITZ, M.D.
Reporter, Pro tem

Gloucester

The regular monthly meeting of the *Gloucester County Medical Society* was called to order by the president, John L. Laurusonis on April 21. The program committee presented Lawrence Singmaster, M.D., Assistant Surgeon, Lankenau Hospital. Dr. Singmaster spoke on "The Early Diagnosis and Management of Gastric Lesions." The discussion was opened by Francis H. Weiss, M.D.

The credentials committee presented the name of Melvin Haas, M.D. of Paulsboro, whose application had been received and found in order. He was unanimously elected to society membership.

Copies of the new constitution for the Gloucester County Medical Society were distributed to members for study. One suggested change would exempt the President, Secretary, and Treasurer from payment of the Society dues.

An auditing committee was appointed by President Larusonis to assist the treasurer. The treasurer reported only four delinquents in payment of annual dues.

ROGER D. LOVELACE, M.D.
Reporter

Hudson

Under the chairmanship of the president-elect, Dr. Sigmund C. Braunstein, *Hudson County Medical Society* convened in regular monthly session on April 5, at the Jersey City Medical Center.

A resolution was introduced "that hospitals establish a general practice section so that licensed physicians may take care of their own patients under proper supervision." It was referred to the Executive Committee for study.

Elected to active membership were Dr. Jonathan C. Gibbs and Dr. James R. Johnson of Jersey City.

Dr. Robert D. Griesemer, Acting Clinical Chief and Executive Officer of the Dermatological Service, Massachusetts General Hospital; Assistant in Dermatology at Harvard Medical School; and Scholar in Cancer Research of the American Cancer Society was guest speaker. The subject of Dr. Griesemer's presentation was "Simple Rational Treatment of Common Skin Diseases." Dr. Moses Holland discussed several points made by the speaker.

STEPHEN A. MICKEWICH, M.D.
Reporter

Middlesex

The regular monthly meeting of the *Middlesex County Medical Society* was held at the Roosevelt Hospital, Metuchen, April 13, with Dr. Malcolm M. Dunham presiding.

On recommendation of Dr. Slobodien of the Judicial Medical Ethics Committee, Dr. Donald T. Akey of Metuchen was elected to a two-year period of associate membership.

A request from the Raritan Arsenal was read, asking for interested physicians to cover medical requirements, if the need arose when military personnel are not available.

Dr. Charles H. Calvin introduced the guest speaker of the evening, Dr. Robert D. Griesemer, M.D., Executive Officer, Dermatologic Service, Massachusetts General Hospital, who gave a very enlightening talk on the rational treatment of common skin diseases.

Questions were asked of Dr. Griesemer and he very graciously and adequately answered all queries.

Dr. Edward J. Brezinski, Chairman of the 1955 Nominating Committee presented a slate of officers, etc., for action at the annual meeting in June.

The meeting was then adjourned and collation served.

HENRY T. WEINER, M.D.
Reporter

Monmouth

The regular monthly meeting of the *Monmouth County Medical Society* was held at Monmouth Memorial Hospital, Long Branch, on April 27, with Dr. Howard Pieper, the president, presiding.

The following were elected to active membership: Drs. Alfred J. Casagrande of Matawan and Joseph L. Gluck of Middletown. Courtesy Membership was extended to Drs. Armand C. Gres of Spring Lake, a member of New York County Medical Society and Louis A. Amdur of Deal, a member of Hudson County Medical Society.

The speaker before the scientific session was Dr. Otto Steinbrocker, Assistant Professor of Clinical Medicine, New York University. His subject was "The Arthritides."

DONALD W. BOWNE, M.D.
Reporter

Passaic

The regular monthly meeting of the *Passaic County Medical Society* was held on Tuesday, March 15, at the Medical Society Building. Dr. Leopold E. Thron, the president, presided. Dr. Thron stressed the fact that final payments for building assessments are due April 1. Failure to pay will place the members in "bad standing."

Attention of the members was called to the series of lectures on "Trauma" held each Friday afternoon at the Society Building.

The program of The Woman's Auxiliary in conjunction with The Passaic County Mental Health Association, to be held March 21, was announced.

The subject is "The Younger Generation — Delinquent or Confused?"

Dr. Ianacone told of the lack of interest shown by some physicians in answering emergency calls. He noted that osteopaths were willing and quick to make these calls.

Dr. Thron stated that the Chairman of the Medical Practice Committee would like to have a real definition of "Corporate Practice of Medicine" which was requested by The Medical Society of New Jersey, and suggestions from members were invited.

The President spoke of the many preparations which are being made with regard to the Salk Vaccine so that everything shall be in readiness for administering this vaccine when it is approved. Thereupon, the following Resolution, adopted by The Medical Society of New Jersey, was affirmed by the Passaic County Medical Society;

"RESOLVED: That we give provisional approval to the 1955 Salk Immunization Program, provided the results of the evaluation studies of the 1954 program prove the vaccine to be safe and effective."

Dr. Thron explained that the Woman's Auxiliary is having a difficult problem this year in raising money for the Nurses Scholarship Fund inasmuch as they are prohibited from holding card or bingo games as they had heretofore. They are circularizing the Society membership and are asking its members to help this worthwhile cause, especially since the physicians are eventually involved in this result.

Dr. Henry Shapiro then introduced the speaker, Herbert Lichtman, M.D., Associate Professor of Medicine, State University of New York, who spoke on "Hereditary Anemias."

A collation was then served by hostesses of the Woman's Auxiliary.

The regular monthly meeting of the *Passaic County Medical Society* was held on April 26 at the Medical Society Building. Dr. Thron, the President, presided.

The following physicians were elected: Active membership — Dr. Frank S. Linane of Glen Rock; Associate membership — Dr. Robert H. Seela of Ridgewood.

The Secretary read the following resolutions on the deaths of two members of the Society, which resolutions were adopted as read:

Dr. Sherman K. Foote, born in New York City in 1874, graduated from the College of Physicians and Surgeons of Columbia University in 1899. He was of the old school of physicians, and practiced in New York City at the turn of the century.

In 1931, when he was 57 years old, because of failing health, he decided to leave New York and settle in the small community of Wyckoff, where the tempo was slower and the living easier. He felt that here he could continue a small practice sufficient to keep himself occupied. As time went on, however, he found his practice getting bigger, and almost before he knew it, he was again working full-time. He was the school physician for Wyckoff and Midland Park, and Health Officer for Oakland, Franklin Lakes, Wyckoff, Midland Park and Saddle River.

He was one of the best known and most popular doctors in the area, and continued to work to the end as much as his health and age permitted. Dr. Foote was a living example on how to retire by working.

WHEREAS: God in his wisdom has seen fit to take from us Dr. Sherman K. Foote, who died on February 12, 1955 and

WHEREAS: In his passing, our Society lost a valued colleague and the community lost a good and faithful servant,

BE IT RESOLVED THAT: The Passaic County Medical Society records with sorrow the passing of Dr. Foote and extends to his bereaved widow and family its sincere condolences, and that this Resolution be inscribed in the minutes and a copy be transmitted to his widow.

WHEREAS: God in His Infinite Wisdom has deemed it best to take from our midst, Dr. Joseph A. Maclay, a beloved colleague, a conscientious, skilled and most devoted physician, having practiced medicine for 50 years, a highly respected citizen of our community, and an endeared friend to all his professional associates,

WHEREAS: The officers and members of the Passaic County Medical Society, express our sorrow for the loss of so fine a physician and friend,

BE IT RESOLVED: That the Passaic County Medical Society extend to his bereaved wife its heartfelt sympathy in her bereavement,

BE IT FURTHER RESOLVED: That these Resolutions be spread in full in the minutes of the Passaic County Medical Society, and that a copy be sent to Mrs. Joseph Maclay.

Dr. Jehl commented on the small number of Passaic County members attending the meeting at Atlantic City.

Dr. Thron spoke on the propriety of paid announcements and news stories upon opening an office, returning to practice, relocation of office or new association. He called upon Mr. Norris to explain further what the proposal entails. After lengthy discussion on this subject, a vote was taken on the adoption of the proposal made. Upon counting the hands raised, the proposal was rejected and referred back to the Committee for further study.

Dr. Thron then turned the meeting over to Dr. Francis B. Brogan who introduced the speaker, Lee Gillette, M.D., Attending Surgeon, Gastro-intestinal Clinic, Roosevelt Hospital, N. Y. He spoke on "The Diagnosis and Management of Biliary Tract Obstruction" with illustrations by slides and colored films.

Refreshments were then served and a social hour enjoyed.

DAVID B. LEVINE, M.D.
Reporter

Salem

The regular monthly meeting of the *Salem County Medical Society* was called to order by the president, Dr. John B. Norton on March 18 at 4:35 p.m.

Dr. David Kramer was introduced by Dr. Wilbert R. Staub; his talk was entitled "Arterial Occlusive Disease."

As means of testing circulation, one may use (1) oscillometry, (2) histamine test.

Clinical signs of early ischemia are (1) rose spots, (2) small scars, (3) blebs.

Buerger's disease probably has an inflammatory background; it starts in the deep veins, is always a slow process, and should start in the lower extremities. Always consider endarteritis obliterans in differential diagnosis.

For embolic occlusions, use (1) para-vent block, (2) vasodilators, (3) embolectomy early.

Dr. Kramer ended with a brief discussion of Primary Arterial Thrombosis, Thrombophlebitis and Scleroderma.

Business meeting at 6:45 p.m.

After a brief discussion of the Society's joining the N. J. Hospital Plan, Drs. Gilpatrick, Madara, Taylor and Mark were renamed a committee to contact each individual member.

It was announced that a new Bulletin Board will be erected in the Doctors' Lounge at the Salem Hospital.

Dr. H. F. Suter reported that only favorable answers were received from the questionnaire.

The Woodstown Ambulance Crew requested a formal teaching program.

Dr. Suter gave a report on the Polio Vaccine Program. The program recommends sterilizing by boiling but Dr. Suter recommended autoclaving. It was felt that we should follow the State Society's recommendations.

The nominating committee read the following slate of officers: President—Dr. Eugene Pashuck; Vice-President — Dr. Isadore Lipkin; Secretary-Treasurer — Dr. Charles E. Gilpatrick.

Dr. E. E. Evans moved that we accept the slate. Move seconded and carried.

Dr. R. L. Silverman was re-elected delegate to The Medical Society of New Jersey in 1958, with Dr. Charles B. Norton as alternate.

Meeting adjourned to supper at 6:15 p.m.

CHARLES E. GILPATRICK, M.D.
Reporter

Somerset

The regular meeting of the *Somerset County Medical Society* was held on April 26 with Dr. M. E. Tolomeo, President, presiding. This was a joint meeting with the Surgical Department of the Somerset Hospital.

Dr. Anthony D. Crecca of St. Michael's Hospital, Newark, spoke on "Cardiac Emergency in the Operating Room." After the lecture a film was shown. After the conclusion of this scientific meeting, there was a business session. The following doctors were accepted as new members: Dr. Nicholas Antoszyk, Jr., Dr. William Kuh, and Dr. E. Calvin Moore.

The date for the Annual Clambake was set for June 16 at the Johns-Manville picnic area.

C. S. McKINLEY, M.D.
Reporter

Union

The annual meeting of the *Union County Medical Society* was held at the White Laboratories in Kenilworth on April 13 with the members as dinner guests of the Laboratories.

The following officers were elected for one year: President, Carl G. Hanson; President-Elect, Paul J. Kreutz; First Vice-President, Thomas S. P. Fitch; Second Vice-President, Graham C. Newbury; Secretary, Nathan S. Deutsch; Treasurer, Henri E. Abel; Reporter, Merton L. Griswold, Jr.

Dr. Bournes was presented a certificate commemorating his retirement as president of the society.

Dr. Carl Hanson assumed the chair and Dr. Bournes gave his farewell presidential address, the title of which was "Celery Hearts."

Reports of the standing committees were then given. Plans were also discussed concerning the reception for the outgoing president of The Medical Society of New Jersey, Dr. Elton W. Lance of Rahway, which was to be held in Atlantic City during the annual meeting.

Three candidates were unanimously elected to membership in the society by transfer from other counties. They are Drs. Frank Romano and Theodore Spritzer, of Dunellen, from Middlesex County, and Dr. Theodore Chenkin, Jamaica, N. Y., from Queens County.

MERTON L. GRISWOLD, M.D.
Reporter

INAUGURAL ADDRESS

Mrs. Andrew C. Ruoff, Sr.

Honored Guests, Members of the Board, friends, and members of my family who found it possible to be with me on this outstanding occasion:

It is with a feeling of humility and gratitude that I stand before you as the President of the Woman's Auxiliary to The Medical Society of New Jersey for 1955-56.

With gratitude, because you have seen fit to honor me with the presidency, and with humility, because I realize our dependency on God for His guidance and direction.

Our Lord gave us two commandments, which embrace the ten given on Mount Sinai. They, as you know, are, in effect, "Love the Lord they God with all they heart and with all thy mind and thy neighbor as thyself." Our husbands, those wonderful men we are married to, have always carried out these commandments. They realize, as they stand by a sick-bed, or scrub up for an operation, or counsel those who come to them for aid, that without the help of God, all the knowledge they were privileged to attain would be as nothing. They have the love of their fellow men in their hearts, or they would not give themselves so wholeheartedly to treating, counseling, and guiding those who entrust themselves to their care.

And, so we come to the Auxiliary of the Medical Society. The wives of our medical men have always tried in every way to be helpmates or, can we say, "The power behind the throne." They have always busied themselves trying to assist their husbands in any way possible, and so have answered telephones, acted as nurses, and also as buffers between their husbands and their patients.

The idea of a Medical Auxiliary was evolved so that the wives, as then, the unknown factor in the picture, or the voice over the telephone, could meet each other and get to know each other, with the result that friendship might be promoted among them.

It was not long before it was found that the Auxiliary could be of benefit to the Medical Society—which brings us down to the present.

The members of our State and County Auxiliaries have found a very busy life for themselves in assisting in the work their husbands are so vitally interested in. They interest themselves in community work, such as the American Cancer Society, The Tuberculosis and Health League, The American Red Cross, The Heart Association, Cerebral Palsy, Infantile Paralysis, and many other such organizations.

It is very important that they do so, because by so doing they are helping to carry out the commandment, "Love thy neighbor as thyself," and to love their neighbors, they must know and understand their problems.

As members of the Medical Auxiliary we carry out our humanitarian work and also aid our husbands through our various committees.

Under the direction of our Chairman of the Chronically Ill, the Homemaker's Service has come into being in a few of our counties, and we are hoping that some day all of our counties will have a Homemaker's Service.

Our Chairman of Legislation keeps us alerted on matters pertaining to legislation which might affect the practice of medicine and surgery, its activities and ideals, so that the public interest might best be served in all of its health problems.

Our Chairman of Medical History is keeping a record of the outstanding physicians in our state so that they will go down in medical history and that their achievements may be made known.

We also have a Committee on Mental Health. Much is being done in this field today. Once an emotionally disturbed patient improves to the extent of being able to live outside the hospital, the public must be educated to absorb that patient into the community, and thereby be of help both to him and the state.

Our Chairman of Nurse Recruitment sets a very important program in action since there is always a shortage of nurses and the need for them is great, both to the patient and to our physicians.

Through our Chairman of Rural-Community Health and her committee, health education has been promoted throughout the state by the medium of films, speakers and publicity.

Our Safety Chairman strives to keep us safety conscious. We all need such reminders.

Today's Health is being promoted by our *Today's Health* Chairman. This magazine is

an aid in the education of the public in health topics.

And, thus you can see, we have come a long way from our original purpose in organizing, which was merely to become acquainted with each other.

However, through the work we are doing we are really becoming better acquainted than we would have by mere social activities, and at the same time we are doing something constructive and worthwhile for our medical men in their care of the sick.

May we all work hard during the coming year, aiding and assisting each other in all our undertakings, and as I heard it quoted somewhere, "Individual loose bricks can be tossed about by a child, but bricks well cemented together can resist cannon fire." Let us be the bricks well cemented together, so that nothing can pull us apart, but united we may be a real worthwhile organization.

It is with a plea for your assistance and support during the coming years that I bring this talk to a conclusion.

Nurse Recruitment and Nurse Scholarship

An active nurse recruitment program can effectively relieve the acute shortage of nurses with which we are now faced. This program can be enhanced by giving the general public an understanding of its importance. To alleviate the shortage, 50,000 nurses are needed each year in the United States. In New Jersey 600 students will have to be trained yearly to meet the demand.

Why such an acute shortage of nurses? The increase in population and greater longevity are important factors. There has been a steady increase in the number of hospitals, hospital beds, and hospital admissions. In addition, many nurses are needed by the U. S. Public Health Service and by the Armed Forces. Greater numbers of nurses are being utilized in industry. Health education programs are influencing people to seek more medical aid, including nursing care. Although these are not the only factors, they certainly make obvious the tremendous demand for an active nurse recruitment program and its end result: more nurses.

The county nurse recruitment chairmen have played an important part in support of this program; 12 counties have Future Nurse Clubs and 15 offer nurse scholarships.

Following a proclamation by President Eisenhower, designating October 10 to 16, 1954 as National Nurse Week, each county nurse recruitment chairman participated to the utmost in spite of short notice. These chairmen also helped with a survey on "Present Nurse Recruitment Resources" carried out by the New Jersey Committee on Careers in Nursing and Dean R. Miller of Fairleigh Dickinson College. This is being tabulated and results will be made available upon completion.

It was recently found, in a short period of time, that 178 inquiries were made in New Jersey regarding professional nurses' training. Therefore, with 39 accredited professional schools of nursing and 4 accredited collegiate programs available, we can help meet the demand if we double the number of Future Nurse Clubs in our secondary schools (public, parochial or private) thereby increasing the number of prospective nurses.

MRS. BEN W. BERNER

Auxiliary Report • • •

Essex

Mrs. Philip R. D'Ambola, President, presided at an Executive Committee meeting and a regular monthly meeting of the *Woman's Auxiliary to the Essex County Medical Society* on March 28 at 369 Park Avenue, Orange.

Public Relations Day chairman, Mrs. Frank M. Galioto, reported that out of 17 school districts in Essex County, 15 were represented at our Public Relations Day "School Health" program on March 16, 1955.

This month we extend a hearty welcome to two new members, Mrs. John H. Eck and Mrs. Franklin J. Mascia.

Mrs. Harry E. DiGiacomo, program chairman,

announced that the recipes from our cookie contest last month were compiled in a booklet, and that $90 was realized from the sale of these booklets. This will benefit the A.M.E.F. As of April 5 a total of $500 was donated by our Auxiliary to the A.M.E.F.

The Executive Committee recommended that the Auxiliary give to the Nurse Scholarship committee an additional $400 for this year and that the $200 returned last year be used this year. It was agreed that two or more nurse scholarships will be given each year and that this nurse scholarship amount be commensurate with the Auxiliary's ability to finance it.

Since some of the by-laws have been revised, 500 Constitution and By-Laws books will be printed for distribution in the Auxiliary.

The Nurse Scholarship committee reported that two $500 scholarships and two $300 scholarships will be awarded, and through the efforts of our Auxiliary we were able to get a $400 scholarship from St. Michael's Hospital, Newark, for another deserving candidate.

At this meeting our former presidents were honored. The ceremony was conducted by Mrs. Frank S. Forte, who presented beautiful floral corsages to the 12 past presidents who were present. We were honored to have with us our first president, Mrs. George A. Rogers.

Following the meeting, Mrs. DiGiacomo arranged for a delightful and unique musical program. Mr. Paul F. Steffen, musicologist, teacher and entertainer played on the Dulcimer, musical glasses, sleigh bells, bottles and Swiss Hand Bells.

MRS. THOMAS A. MESSINA,
Chairman, Press and Publicity

MRS. JOSEPH DI NORCIA,
Co-Chairman

Book Reviews • • •

Many of the reviews in this section are prepared in cooperation with the Academy of Medicine of New Jersey.

Pediatric Diagnosis. By Morris Green, M.D. and Julius P. Richmond, M.D. Pp. 408. Philadelphia. Saunders. 1954.

The book is dedicated "to those who care for children everywhere." Its purpose is to acquaint physicians with the differences between pediatric and adult medicine. The book emphasizes the importance of the physician's constant awareness that children are not simply small adults.

The general text reviews each disease from etiology through diagnosis and treatment to prognosis. This book presents differential diagnoses to be considered at many points while reviewing pediatric problems.

The first section discusses the pediatric history. With each opportunity for a variance from the normal, a differential diagnosis is presented. The second section is a review of the physical examination of children. It spurs the reader's wits with a differential diagnosis at each variation from normal again.

G. G. Salmon, Jr., M.D.

Current Concepts in Digitalis Therapy. By Bernard Lown, M.D. and Samuel A. Levine, M.D. Pp. 164, Boston, Little, Brown and Co., 1954. ($3.50)

Medical common sense is urgently needed in prescribing cardiac glycosides and antibiotics. This pocket-sized manual should help the reader acquire a sensible understanding of the digitalis preparations.

The authors emphasize that, (except in certain atrial arrhythmias) slowing of the heart rate by digitalis is primarily due to restored cardiac compensation. The major effect of digitalis is its direct action on the myocardium by increasing the force of the systolic contraction without alteration in the diastolic fiber size. For this reason digitalis is of value only where congestive failure is due to a deficiency in myocardial contractions.

Besides its value in congestive failure, "it is the agent of choice in the treatment of paroxysmal atrial tachycardia when simpler methods of vagal stimulation have proved unavailing."

Drs. Lown and Levine stress that a physician should become well acquainted with one or two digitalis preparations rather than try each new glycoside derivative that comes along.

Digitalis intoxication is thoroughly discussed with particular emphasis on the clinical and electrocardiographic manifestations. Dangers of overdosing are clearly delineated.

The relationship of the electrolytes to digitalis, especially potassium, is described. The last chapter of the book outlines a simple digitalis tolerance test to determine whether a patient is completely or only partially digitalized.

Internists, cardiologists and general practitioners who prescribe digitalis with some frequency should be acquainted with the contents of this book.

R. D. Goodman, M.D.

The Physician and His Practice. Edited by Joseph Garland, M.D. with chapters by 18 different authors. Boston, Little, Brown and Co., 1954. Pp. 269. ($5.00)

As might be expected from any anthology, the quality of this volume is exceedingly uneven. Intended for beginners in private practice, the book consists of 19 essays on practical aspects of the doctor's work. Some chapters are full of pious platitudes. Others are crammed with down-to-earth practical tips. There are chapters on community relations, medical societies, hospital affiliations, bookkeeping, preparing tax forms, reading medical journals, decoration of offices, legal problems, and record keeping. There is even a chapter on how a doctor's wife should behave. After discounting the stereotyped advice to be honest, upright, serious, dignified, cheerful, studious and industrious—after discounting all this, there still remains, particularly in the last half of the book, a solid residue of practical pointers. In all, this is an excellent gift to the intern or resident.

VICTOR HUBERMAN, M.D.

Urology. By Meredith Campbell, M.S., M.D. With the collaboration of fifty-one contributing authorities. Three volumes. Pp. 2420. Philadelphia, W. B. Saunders Co., 1954. ($60.00)

This is probably the most comprehensive and complete publication in the field of urology since the classics of Young and Hinman. It is all meat and no fat. It is infinitely superior to any of the present books now in print. It is a compilation of the experiences of numerous outstanding urologists, each in his special interest within the field. It is well organized, chapter by chapter, and runs the gamut from anatomy and physiology to arteriography. Many chapters are complete monographs on a single urologic entity. This is true especially of the chapters on congenital anomalies and on neuromuscular disease. In addition to the chapters dealing with classic urology, others have been added in associated fields, such as nephritis and hypertension, endocrinology, and the adrenal gland.

Although this text is principally for a urologist or a resident or graduate student beginning the specialty, it is an excellent reference for the surgeon who does occasional urologic surgery, or even for the general practitioner who is interested in an authoritative treatise. The latest technics, the newest drugs and therapies are included. Practically the entire third volume is devoted to urologic surgery, with separate chapters for each of the four methods of prostatectomy by the outstanding advocates of each method. Illustrations both of the pathologic specimens and surgical procedures are profuse and informative.

The book is legibly printed on good stock. As with any encyclopedia, there are some minor deficiencies in context. If the reader is a practicing urologist, he will undoubtedly argue the point on statements made, or disagree with some of the authors' opinions. On the whole, however, these volumes represent the most complete survey of the entire field in the past two decades.

A. T. WILLETS, M.D.

Antibiotics and Antibiotic Therapy. By A. E. Hussar, M.D. and H. L. Holley, M.D. Pp. 475. New York 1955. The MacMillan Company. ($6.00)

The practice of medicine has made greater strides in the last decade than in the previous century. This is due, in large part, to the advancing front of antibiotics and chemotherapy. Indeed we now suffer from an embarrassment of riches. We know that antibiotics come close to being true wonder drugs. But the doctor has to do some wondering too. He wonders what drug to use in what dose for what infection. And here Dr. Hussar and Dr. Holley come to his rescue. In what is, perhaps, the first well-rounded, compact, and day-by-day practical manual of the subject, these two VA physicians (I hope the editor will forgive this well-deserved plug for the VA) have given every practitioner a usable *vade mecum*. New Jersey physicians have especial interest in this, for the very word "antibiotic" was coined on the banks of the Raritan, and this state is still a power-house for the manufacture of, and further research into the antibiotics.

The book is divided into three parts. Part I is a 43-page monograph on the fundamentals of antibiotic therapy. It discusses in *general* terms indications, contra-indications, dosage, routes, reasons for failure, combinations of drugs, and resistance to antibiotics. Part II takes up the antibiotics one by one and tells about the absorption, excretion, dosage, contra-indications and complications of each. Part III, "The Drug of Choice" runs the gamut of specific diseases and discusses what drug to use. The manual is limited strictly to antibiotics and therefore does not include anything about the sulfa drugs. Its style is matter-of-fact and down-to-earth. The reader is somewhat heckled with bibliographic references (there are more citations than pages). This book of 475 pages lists 1600 citations to the literature. If the reader learns to ignore the ever-present citation numerals, and does not mind paying $6 for a 475-page book, he will get a solid money's worth out of this useful compendium. There may be newer and better antibiotics developed tomorrow (probably right here in New Jersey) but for a long time to come, Hussar and Holley should be the standard source work on antibiotics and the indispensable guide through the jungle of newer and newer drugs.

ULYSSES M. FRANK, M.D.

The Rauwolfia Story. Author unnamed. Published by Ciba Pharmaceutical Products, Summit, N. J. Pp. 63. Gratis. 1954.

No drug has hit the medical headlines more consistently this year than the derivatives of *Rauwolfiia serpentina*. Here is an old alembic, used by the ancient Hindus for epilepsy, insomnia, insanity, dysentery, diarrhea, hypertension, cholera, blindness, headaches, fever and snake-bite.

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HERBERT BOEHM, M.D.

Health Supervision of Young Children. Prepared by the American Public Health Association. 1955. New York. Pp. 180. Published by the Association at 1790 Broadway, New York City. ($2.00)

Does the physician have any responsibility for helping out in a situation where one little child is dangerously jealous of another? Where a mother threatens a child who masturbates? Where a mother feels guilty because she is emotionally indifferent to her children? Are these, in any sense, in the doctor's province at all?

The authors of this book say 'yes.' Their position is that health is a positive condition (well-being) and not a negative one (absence of disease). To this end, the doctor has to know a lot about human relations and has to develop a skill in teaching health technics to mothers. The book under review very effectively integrates the physical, emotional and social aspects of child care. It shows how the "well baby clinic" (which they prefer to call a "child health conference") carries out supervision. It is chock-full of practical pointers and homely examples. The style is easy to read. The book is written with wit and with pace.

It contains thought-provoking material on rooming-in, preparing formulas at home, floor plans for well-baby clinics, immunization procedures, keeping child health records and health education. There is excellent material on how to hold a conference, how to teach a mother, how to make intelligent use of nurses in health supervision, how to teach accident prevention and even how to take a history. The book specializes in practical tips. But it is permeated by an atmosphere, an attitude, an orientation towards the doctor's role in health supervision which is fundamentally more important than the practical pointers.

The pediatrician needs this both for his direct activities and to furnish a springboard for discussions, lectures and conferences. And every family doctor and general practitioner will be professionally enriched by reading and following its precepts.

RALPH N. SHAPIRO, M.D.

Morals and Medicine. By Joseph Fletcher, Princeton University Press. Pp. 243 with a foreword by Karl Menninger, M.D. ($4.50)

It is possibly significant that this informative and penetrating study of broad problems concerning the welfare of the individual patient — whose sum-total is greater than the sum of his ailments — was written, not by a physician, but by a theologian. In any event, physicians nowadays cannot afford to be so preoccupied with strictly technical aspects of medicine that they no longer have time to investigate matters of paramount importance to the general welfare of the patient. While the author calls such matters "moral" concerns, he emphasizes throughout the book that he is chiefly interested in advocating a patient-physician relationship the primary concern of which is to "care for" the patient in the best tradition of humanitarian medicine.

Drawing heavily on medical sources, when these are available, he brings together conflicting opinions as to what position the physician may take on (1) informing the patient of the diagnosis; (2) contraception; (3) artificial insemination; (4) sterilization; and (5) euthanasia. The systematic presentation and discussion of the material, together with many references to the literature, make the book a scholarly and worthwhile contribution. Although the author's conclusions are sometimes debatable, the information he gives on opposing sides of the same question ought to provide the busy physician with the raw materials for some intelligent thinking on these topics of his own. The historical perspective of the book should, in addition, interest students of the history of medicine. It may, for example, surprise many to learn that the versatile Jonh Hunter experimented successfully with artificial insemination as early as 1785.

LOUIS E. REIK, M.D.

TUBERCULOSIS Abstracts

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Vol. XXVIII June, 1955 No. 6

Renal Tuberculosis

by John K. Lattimer, M.D., Transactions, National Tuberculosis Association, May, 1954.

Destructive tuberculosis of the kidneys occurs in about four per cent of patients with pulmonary tuberculosis. As yet, there hase been no decline in the incidence of this blood-borne complication as a result of the advent of streptomycin and other drugs.

Undetected renal tuberculosis can be very serious as it tends to be bilateral. The early diagnosis of renal involvement is difficult since it is usually asymptomatic for months or years after its onset. Urinary burning and frequency usually appear later when successful treatment is difficult. All patients with pulmonary tuberculosis should have periodic urine examinations for pyuria for five to ten years after their pulmonary infection. In early involvement of the kidneys, the number of pus cells may be as small as one to three per high power field in specimens of specific gravity 1.015.

The rate of progression of a destructive kidney lesion is highly unpredictable. Some lesions can destroy the kidneys completely within four years, while others may take ten or more years to accomplish this. Rarely the lesions may heal spontaneously. Every renal lesion must be regarded as a dangerous complication. Since both kidneys are usually infected by tubercle bacilli in any hemic dissemination, both may become the site of caseocavernous tuberculosis. Usually, however, one kidney breaks down first. In approximately 50 per cent of patients, the other kidney will break down if untreated.

Renal tuberculosis is always secondary to some other focus in the body. In the United States this focus is usually in the lungs. When a hemic dissemination occurs the glomeruli are infected first, then the region of the narrow loop of Henle. This medullary lesion grows larger to become necrotic and slough out, leaving a small papillary abscess cavity which can empty on the tip of the papilla or in the fornix on either side of the papilla. This is the first lesion of renal tuberculosis which is detectable by x-ray. As the cavity grows it may destroy the entire contents of the renal pyramid served by that papilla. The cavity may then extend out to the very capsule of the kidney, which tends to sink in upon the scarred and destroyed calyx. If the abscess does not slough out, it may be seen as a bulging yellow mass of caseous material under the capsule. As the tubercle bacilli and infected caseous material drain into the lumen of the kidney pelvis, other calyces are infected directly. The simultaneous infection of several pyramids often occurs.

Stricture formation as a result of infected material escaping into the kidney, pelvis, ureter, and bladder may choke off the neck of a single calyx, the neck of a major calyx serving half the kidney, or may cause a stricture of the ureter which will kill the entire kidney with great rapidity. Disastrous bladder contractures may eventually follow. The time interval between the primary pulmonary infection and the detection of kidney tuberculo-

sis in one large series averaged eight years. The reason for this long delay is the fact that, even though destruction may be occurring and bacilli going down the ureter, no urinary symptoms are caused for months or years.

Bladder symptoms will eventually occur, however, after a long enough period of time. Hematuria will also eventually occur in most patients if the infection is permitted to persist. Occasionally, hematuria is the presenting symptom. Dull pain over the kidney is frequent, but fever or elevation of the erythrocyte sedimentation rate is rare with renal tuberculosis. Pyuria, together with no pyogenic bacteria on routine culture, should lead to a suspicion of tuberculosis.

The advent of chemotherapy has been a great blessing for patients with kidney tuberculosis. In 1946, even streptomycin alone, produced a dramatic improvement of symptoms in patients whose bladders were not already contracted. The decline in the number of deaths from uremia has been impressive. Combined therapy with PAS and streptomycin, given concurrently for a period of one year, has given considerably better preliminary results than did streptomycin alone. It did not appear to matter whether the streptomycin was given daily or twice weekly.

Isoniazid alone, like streptomycin, does not convert large caseous renal lesions readily and often drug resistance appears after several weeks of treatment. Isoniazid has a distinct danger for patients who are uremic. It is a central nervous system stimulant; and among other disadvantages can cause convulsions if the blood level rises too high. Blood levels should be done on all patients who show any elevation of urea nitrogen or whose kidney function is diminished.

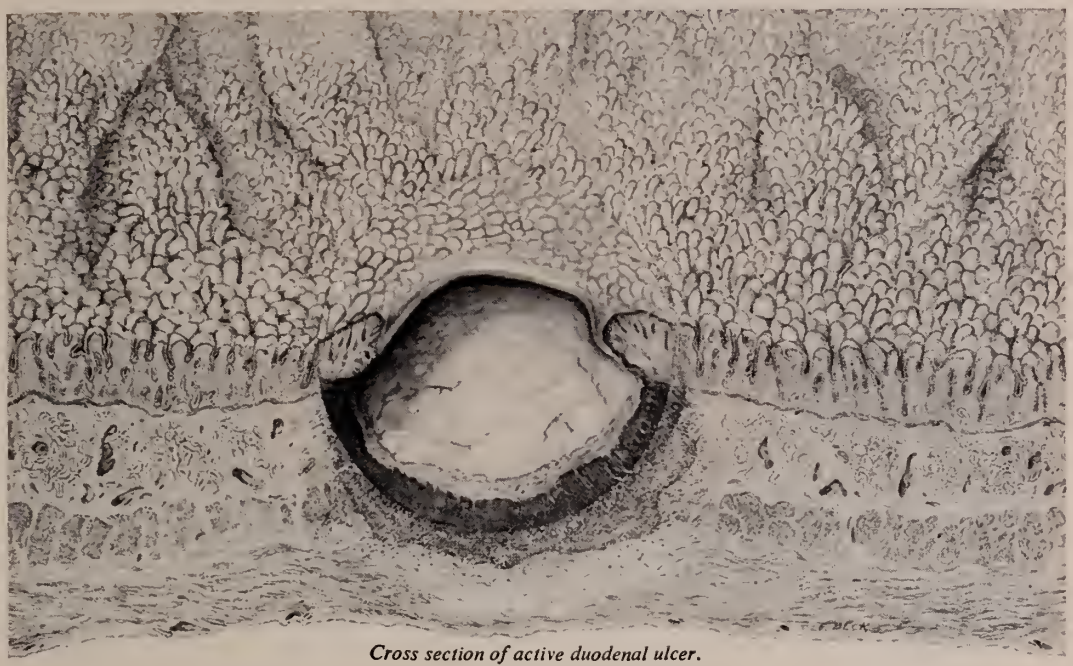
Prostatic lesions which have resulted from, and coexist with, renal lesions, or which remain after a tuberculous kidney has been removed, are currently treated with a combined regimen of streptomycin, PAS, and isoniazid for a period of at least one year. Radical prostatovesiculectomy is advised only in the rare cases with intractable pain. A tuberculous epididymis is removed only after three weeks of chemotherapy if the patient is sterile.

Unilateral, destructive tuberculosis of the kidney is probably best treated by nephrectomy followed by one year of combined treatment with streptomycin and PAS. To date, the presence of any lesion large enough to be visible by x-ray has heralded a poor prognosis for permanent conversion by chemotherapy alone. The newer chemotherapeutic regimens may justify a trial of at least one year of chemotherapy before surgery is advised. The operation should be postponed long enough to make certain that the urine from the contralateral kidney is free of tubercle bacilli and pus cells. In selected cases partial resection of the involved kidney area may be advisable, after four to six months of combined therapy with streptomycin and PAS. The period of treatment should be at least one year.

Bilateral, inoperable renal tuberculosis is now treated with combined chemotherapy for at least one year. If pyuria still persists a second year of treatment may be given. Patients are kept in a semi-ambulatory rest regimen for the first six to twelve months. At the present time regimens employing isoniazid, streptomycin, and PAS together for a period of one year are being tested. Some patients will also be tested on a combination of isoniazid and another tuberculostatic drug for a second year. If one kidney is only slightly worse than the other, the worse kidney should not be removed. The patient will only die sooner.

Prostatic and epididymal tuberculosis are now being treated with one year of combined chemotherapy. Epididymectomy is advised for lesions which are obviously very large, caseous, or necrotic. The operation is followed with one year of combined chemotherapy.

Eight years of observation of bacteriological data, roentgenographic data and symptomatic and survival data have convinced us that modern chemotherapy is certainly effective in modifying the formerly lethal course of renal tuberculosis. A careful search for small numbers of pus cells in the urines of all patients with a history of pulmonary tuberculosis is the most valuable test which can be done, for it may lead to the early detection and successful treatment of this disease.



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1. Ruffin, J. M.; Baylin, G. J.; Legerton, C. W., Jr., and Texter, E. C., Jr.: Mechanism of Pain in Peptic Ulcer, Gastroenterology *23*:252 (Feb.) 1953.

2. Schwartz, I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: A Clinical Evaluation of a New Anticholinergic Drug, Pro-Banthine, Gastroenterology *25*:416 (Nov.) 1953.

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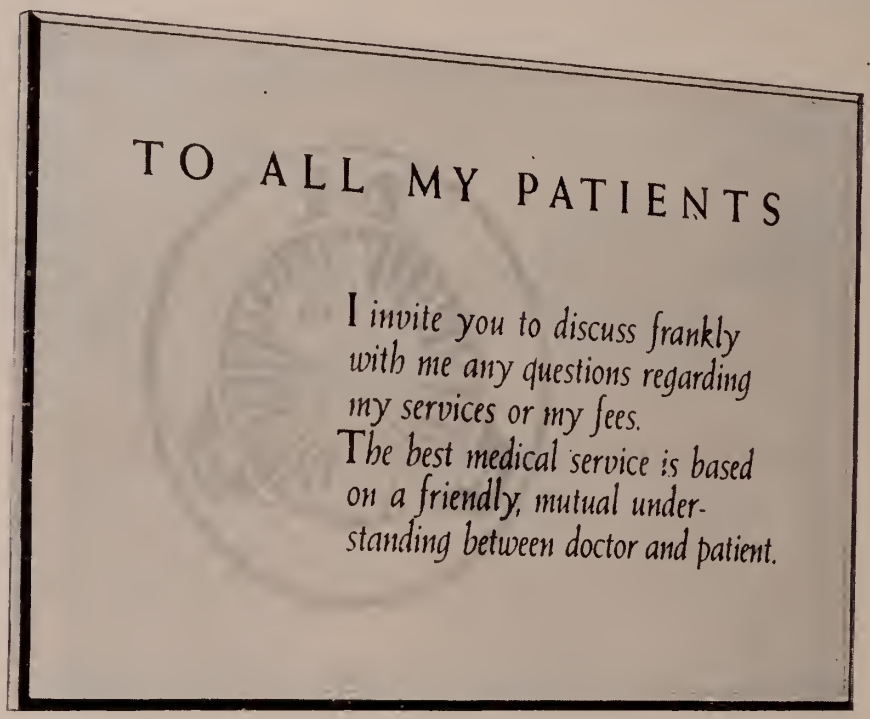

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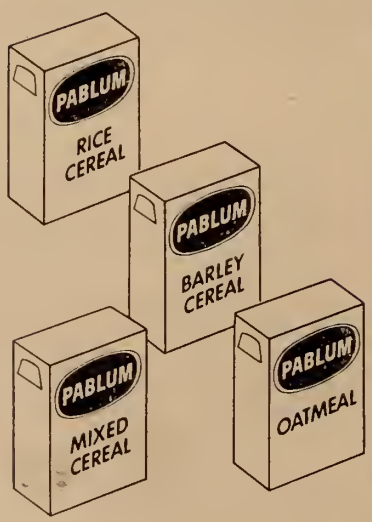

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This Company has been in business more than fifty-eight years and is one of the leading writers of Accident and Health Insurance, with a surplus to policy holders of more than seven million dollars.

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Through

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Authorized Disability Insurance Representatives of The Medical Society of New Jersey

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THE MEDICAL SOCIETY OF NEW JERSEY

Founded July 12, 1766

PLACE OF PUBLICATION, PRINTING AND MAILING, 116 LINCOLN AVE., ORANGE, N. J.
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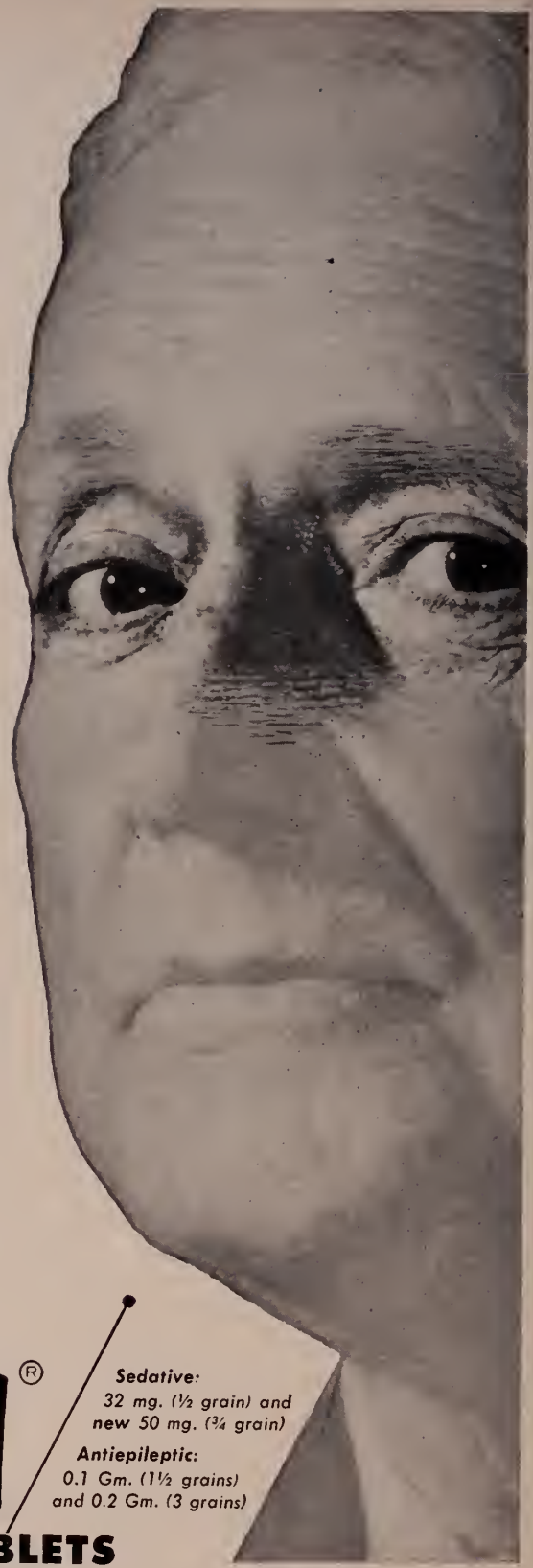
Relaxed but awake



In emotional and nervous disorders, Mebaral exerts its calming influence without excessive hypnotic action.

Mebaral is also a reliable anticonvulsant.

INDICATIONS:

Because of its high degree of sedative effectiveness, Mebaral finds a great field of usefulness in the regulation of agitated, depressed or anxiety states, as well as in convulsive disturbances. Specific disorders in which the calming influence of Mebaral is indicated include neuroses, mild psychoses, nervous symptoms of the menopause, hypertension, hyperthyroidism and epilepsy.

for sedation

Mebaral®

Tasteless **TABLETS**

Sedative:
32 mg. (½ grain) and new 50 mg. (¾ grain)

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0.1 Gm. (1½ grains) and 0.2 Gm. (3 grains)

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Offering for the convenience of your psychiatric patients modern therapies and facilities. Located in peaceful surroundings on a 300 acre farm.

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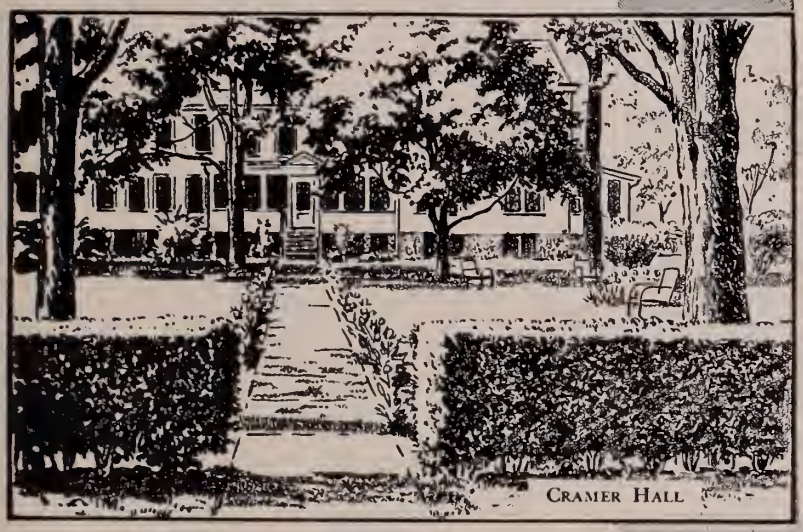

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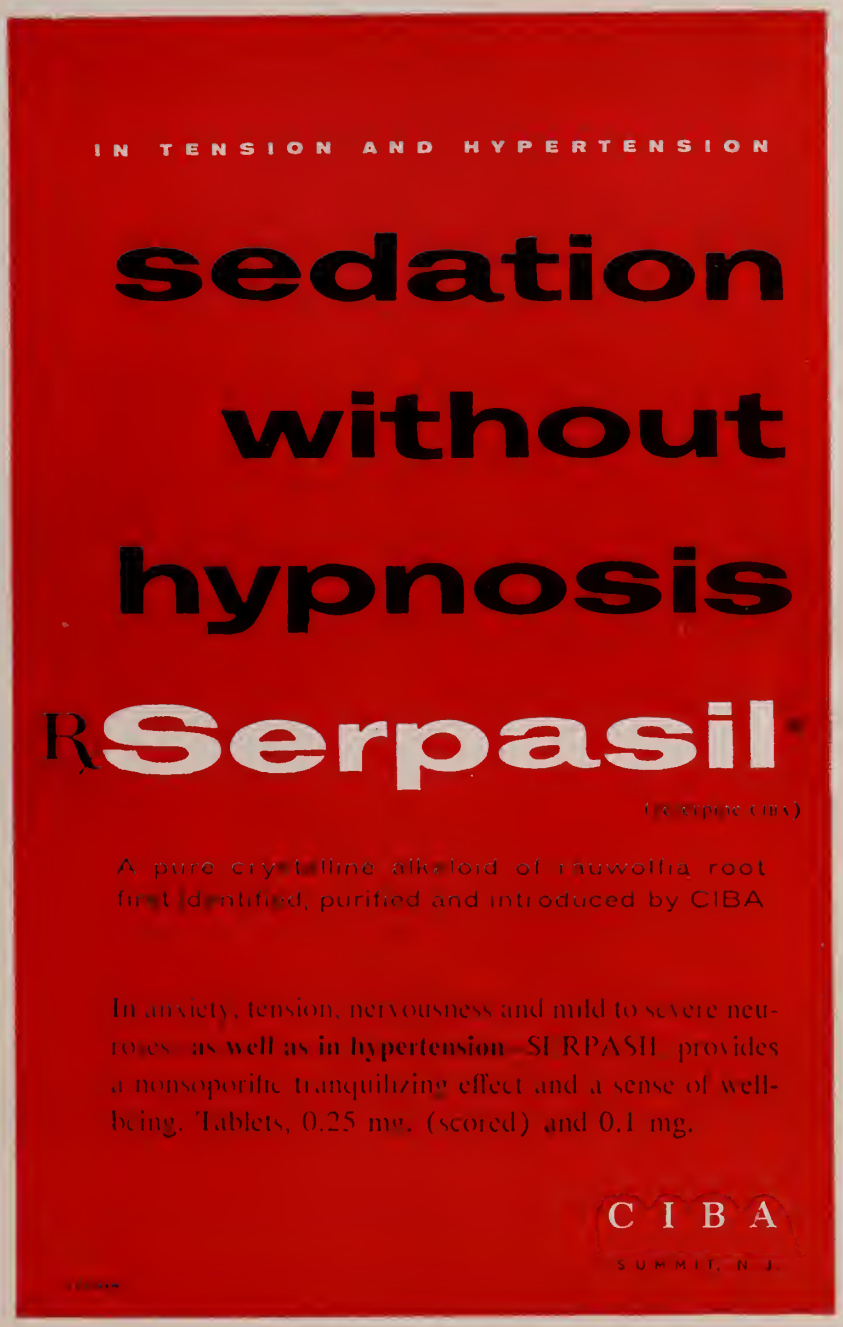

New! SERPASIL® ELIXIR
Each 4-ml. teaspoonful contains 0.2 mg. of Serpasil

DOCTOR, here's a question and an answer you may find useful when patients ask about cigarettes:

What do Viceroys do for you that no other filter tip can do?

These filter traps, doctor, are composed of a pure white non-mineral cellulose acetate. They provide maximum filtering efficiency without affecting the flow of the smoke.

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ONLY A PENNY OR TWO MORE THAN CIGARETTES WITHOUT FILTERS

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PREDNISOLONE, SCHERING (METACORTANDRALONE)

DISCOVERED AND

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METICORTELONE possesses hormonal properties, and anti-rheumatic and anti-inflammatory effectiveness similar to those of METICORTEN,[1-4] the first of the new corticosteroids. Both are five times more active, milligram for milligram, than cortisone or hydrocortisone. METICORTELONE and METICORTEN are relatively free from significant water or electrolyte disturbances.

PREDNISOLONE, SCHERING (METACORTANDRALO

clinical use

ORTelone

PREDNISOLONE, SCHERING (METACORTANDRALONE)

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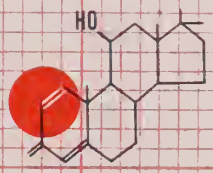
METICORTELONE is an analogue of hydrocortisone, as METICORTEN is of cortisone. The availability of these new steroids, both discovered by Schering research, provides the physician with two therapeutic agents of approximately equal effectiveness.

METICORTELONE – Schering's brand of prednisolone, also known as metacortandralone.



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4. Herzog, H. L., and others: Science *121*:176, 1955.
5. Dordick, J. R., and Gluck, E. J.: J.A.M.A. *158*:166, 1955.

Schering

METICORTELONE is now available as 5 mg. buff-colored tablets, bottles of 30 and 100. In the treatment of rheumatoid arthritis, dosage of METICORTELONE begins with an average of 20 to 30 mg. (4 to 6 tablets) a day. This is gradually reduced by 2½ to 5 mg. until maintenance dosage, which may be between 5 to 20 mg., is reached. The total 24-hour dose should be divided into 4 parts and administered *after meals and at bedtime.* Patients may be transferred directly from hydrocortisone or cortisone to METICORTELONE without difficulty.

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METICORTEN

PREDNISONE, SCHERING (METACORTANDRACIN)

- replacing the older corticosteroids
  in
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- more active than hydrocortisone or cortisone
  milligram for milligram
  relatively free of significant metabolic,
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METICORTEN is available as 5 mg. scored, white tablets in bottles of 30 and 100.

METICORTELONE,* brand of prednisolone (metacortandralone).
METICORTEN,* brand of prednisone (metacortandracin).
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MC-J-516

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you can prevent attacks of angina pectoris

Peritrate, a long-acting coronary vasodilator, has repeatedly demonstrated its effectiveness in preventing attacks of angina pectoris in 4 out of 5 cases.[1,2,3]

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The specific needs of most patients and regimens are met with Peritrate's various dosage forms. Peritrate is available in both 10 and 20 mg. tablets; Peritrate Delayed Action (10 mg.) allows uninterrupted continuation of protection through the night.

References:
1. Winsor, T., Humphreys, P.: Angiology *3*:1 (Feb.) 1952.
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3. Dailheu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.
4. Russek, H. I., *et al.*: Am. J. M. Sc. *229*:46 (Jan.) 1955.

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broad-spectrum
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- Rapidly attained therapeutic levels
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- For use when oral therapy is not practical or is contraindicated
- Just 100 mg. (one single-dose vial) every 8 to 12 hours is adequate for most infections in adults
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- When reconstituted, forms a *clear* solution

Supplied: In dry powder form, in single-dose vials. When reconstituted by addition of 2.1 cc. of sterile aqueous diluent, each single dose (2 cc.) contains:

Crystalline Terramycin hydrochloride	100 mg.
Magnesium chloride	5%
Procaine hydrochloride	2%

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THE GREATEST ACHIEVEMENT IN ZENITH'S CRUSADE TO LOWER THE COST OF HEARING

ZENITH'S FINEST QUALITY
IN THE TINY, NEW
3-TRANSISTOR
"75-X" HEARING AID
FOR ONLY $75.00

The discovery of transistors to replace conventional vacuum tubes opened a bright new horizon of help for those who are hard-of-hearing. But price—and price alone—has kept many from enjoying the greater hearing-aid clarity, compactness, convenience and low operating cost offered by this modern "electronic miracle."

Now—in the completely tubeless, 3-transistor Zenith "75-X", all these advantages can be obtained for only $75.00! The importance of the "75-X" to America's hard-of-hearing is instantly evident when you compare its low price to the $250 to $300 being charged for some competitive 3-transistor hearing aids.

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HEARING AIDS
By the Makers of World-Famous Zenith TV and Radio Sets

10-DAY MONEY-BACK GUARANTEE

Your hard-of-hearing patients can try a Zenith aid at home, work, church, theater, anywhere... and if they are not completely satisfied, they need only return the instrument within 10 days and their money will be refunded. Zenith purchasers also have the protection of Zenith's One-Year Warranty and Five-Year Service Plan. Easy time-payments, too, if desired.

A COMPLETE LINE OF HEARING AIDS

There are four other great models in Zenith's complete line of superb hearing aids, providing help for borderline to the most severe cases of correctable impairment. Each is built to Zenith's unvarying standards of quality—each offers special advantages—and each is moderately priced and economical to operate in line with Zenith's continuing crusade to help more people hear better at far lower cost.

You can refer your hard-of-hearing patients with confidence to any of the franchised Zenith Hearing Aid dealers listed on the opposite page:

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Dover Jewelers, Inc., 19 E. Blackwell Street

EAST ORANGE
Anspach Bros., 533 Main Street

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F. G. Hoffritz, 30 Park Place

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Plaza Jewelers, 111 Plaza Road

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Freehold Hearing Aid Ctr., 16 W. Main Street

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Meat...

and the Problem of Senile Osteoporosis

Perhaps under the still-persisting influence of the mistaken "health legends" of former days, many older people tend to eat less meat and other nutritionally valuable protein foods than they should; thus, the osteoporosis that occurs naturally in the aging body may be unduly augmented.[1]

A balanced diet supplying optimal amounts of protein is essential, and appears to be useful in preventing and in slowing the progress of osteoporosis in senile persons. Adequate protein intake is instrumental in supporting osteoblastic activity so necessary for production of osseous matrix. "When osteoporosis is present, the prime objective is an adequate, high protein diet (a gram or more [of protein] per kilogram of body weight), to aid in building bony matrix for osteoblastic activity."[1]

Meat constitutes one of the most important sources of protein in the nutrition of the aged. Meat offers biologically effective protein—effective in the maintenance as well as the reconstruction of wasted or damaged tissue. Its natural content of B vitamins and of essential minerals not only helps to supply the daily needs for these nutrients, but is necessary for the proper utilization of amino acids.[2]

The appealing taste of meat, its appetite-stimulating quality, and its almost complete digestibility also are important in geriatric nutrition.

---

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The nutritional statements made in this advertisement have been reviewed and found consistent with current medical opinion by the Council on Foods and Nutrition of the American Medical Association.

American Meat Institute
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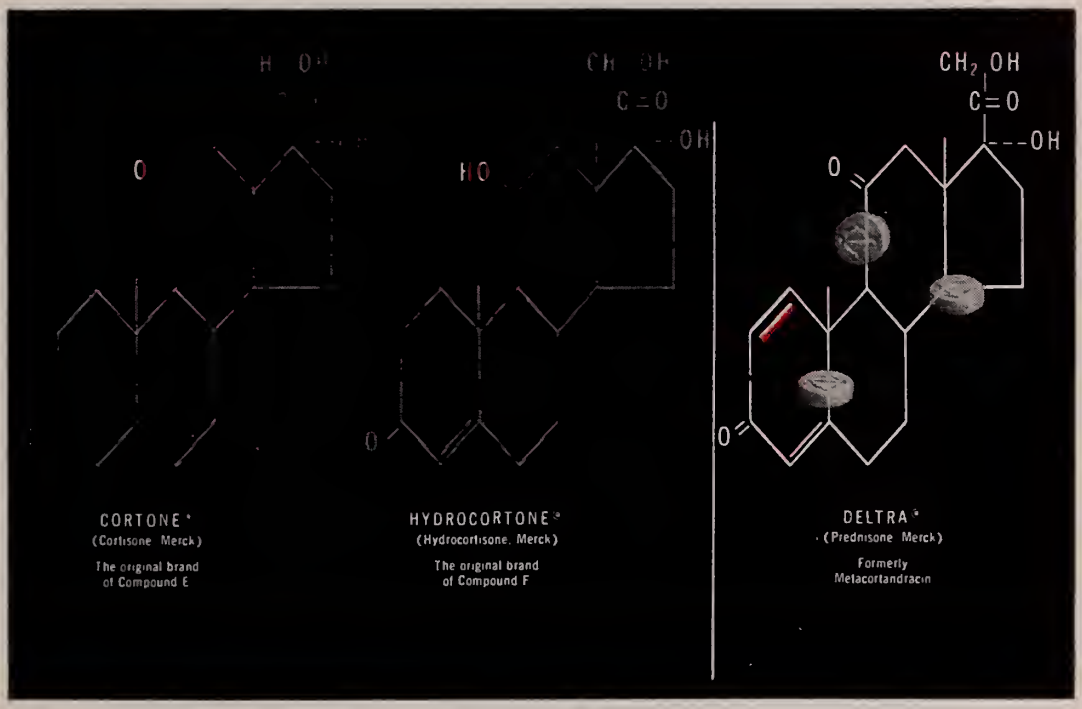
DELTRA® TABLETS

(PREDNISONE, MERCK)

(FORMERLY METACORTANDRACIN)



DELTRA is the Merck brand of the new steroid, prednisone

(FORMERLY METACORTANDRACIN)

DELTRA is a new synthetic analogue of cortisone. DELTRA produces anti-inflammatory effects similar to cortisone, but therapeutic response has been observed with considerably lower dosage. With DELTRA, favorable results have been reported in rheumatoid arthritis with an initial daily dosage of 20 to 30 mg. and a daily maintenance dose range between 5 and 20 mg.

Salt and water retention are less likely with recommended doses of DELTRA than with the higher doses of cortisone required for comparable therapeutic effect.

Indications for DELTRA: Rheumatoid arthritis, bronchial asthma, inflammatory skin conditions.

SUPPLIED: DELTRA is supplied as 5 mg. tablets (scored) in bottles of 30.

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it's called "Anatomatic"
Dramatically simple automation of radiographic control which, even in unskilled hands, closely approaches the goal of "a good picture every time."

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(c) press the exposure button.

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Picker x-ray

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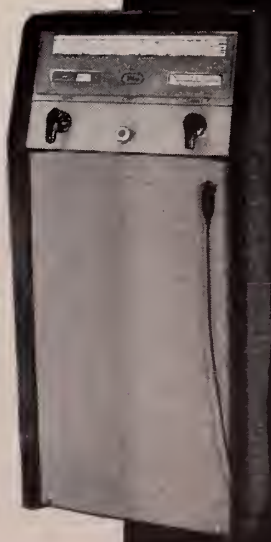
25 South Broadway, White Plains, N. Y.



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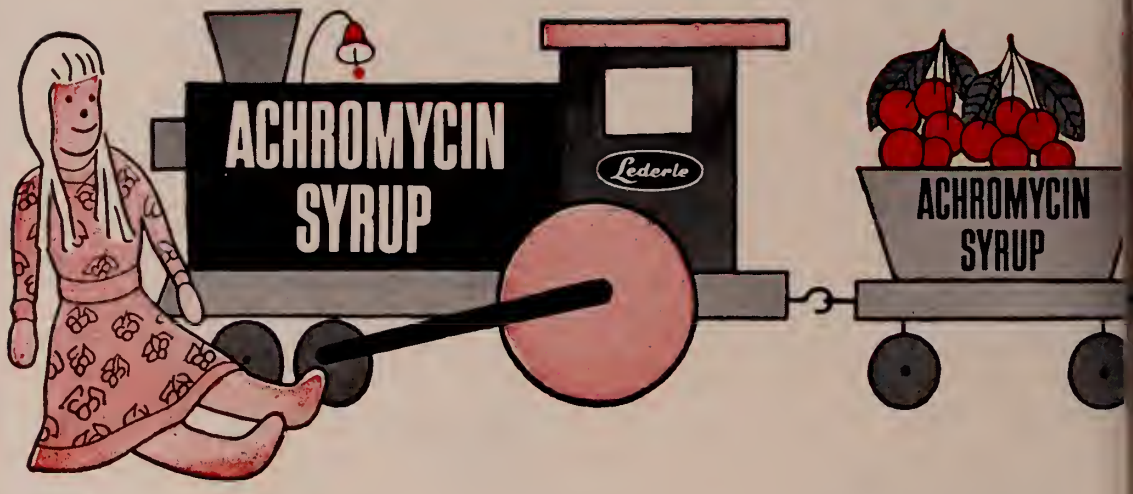

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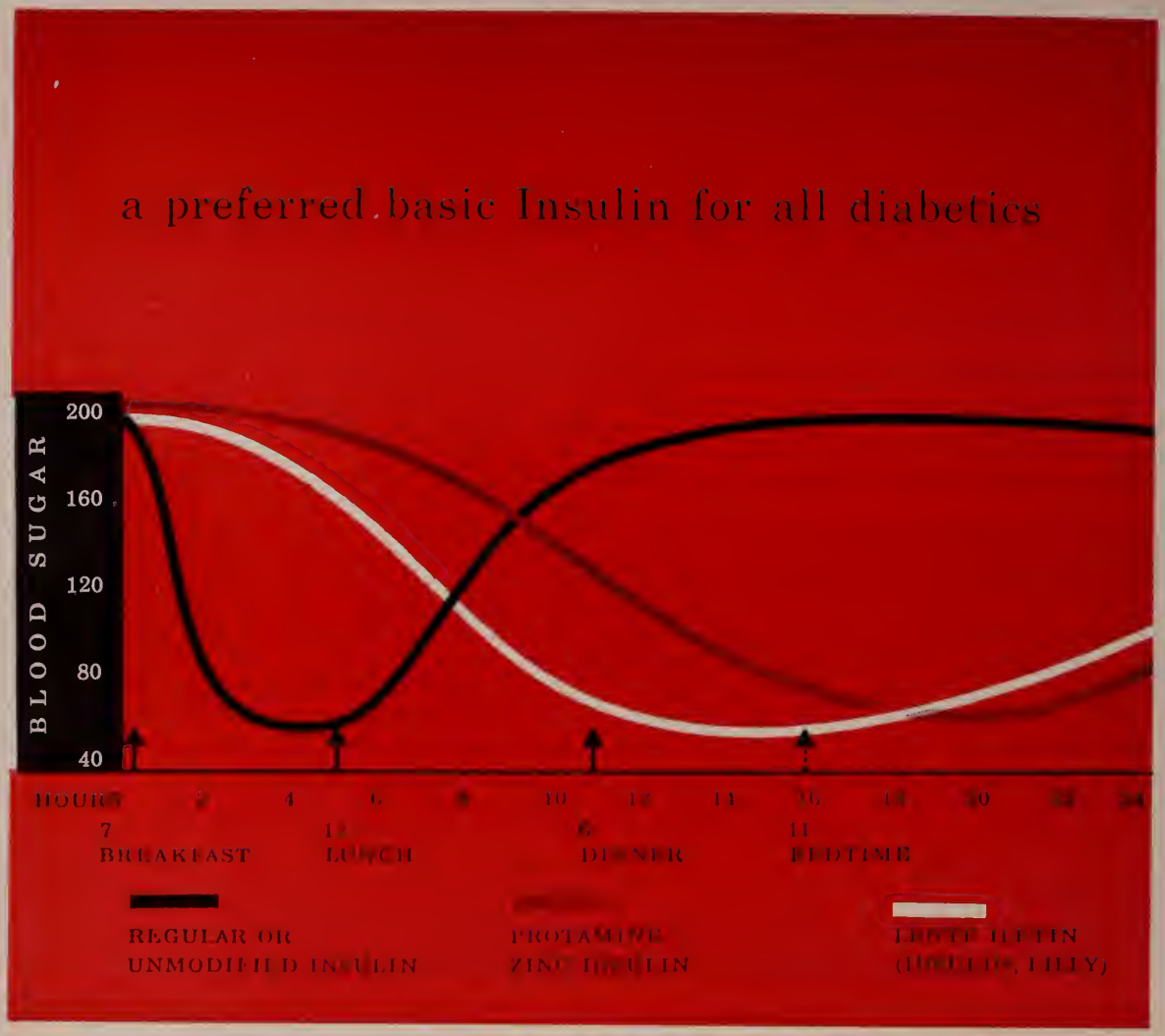

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Editorials • • •

Who Writes of Ethics?

A graduate student in pursuit of a Ph.D. degree recently tried to analyze articles about medical ethics in different periods of our history. She wanted to see if there has been any change in the canons of ethics. She collected references from the primitive medical indexing available in the 19th century. Then she ran down *Index Medicus* for the first quarter of this century (1901 to 1926) and for the current quarter. She found an avalanche of articles on medical ethics in the nineteenth century; she found several every year during the first 2½ decades of this century. But she found that the subject has, since then, almost disappeared from the index.

Any doctor over the age of fifty can confirm that conclusion. He will recall the popularity of ethics as a subject for an inaugural or retiring address when the medical society's gavel changed hands. He will remember speeches on the subject at medical school opening sessions and commencements; at specialty society convocations; and at hospital staff meetings. He will remember long evenings of discussion around a colleague's dining room table (in the days when the ladies withdrew to a smokeless drawing room*), discussion in which hair-splitting ethical distinctions were made and teasing problems in ethics presented.

Today when non-scientific topics are discussed, the subject is likely to be economics or politics. The question, for example, of sending follow-up notices to patients, is paraphrased to "will it pay?" rather than to "is it proper?" Since the distribution of medical care has become a political issue, the doctor must be a political sophisticate. The etiquette

*If anybody cares, a drawing room is so-called because, originally, it was a withdrawing room: that is, the room to which the ladies withdrew.

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of a bedside consultation seems, somehow, insignificant compared to an effort to understand the President's re-insurance plan. It would be fine to think that no one writes about ethics today because sermons are no longer needed. Let us hope that here is indeed the reason that essays on ethics have disappeared from our literature.

Does any medical school today have a definitive course in medical ethics? Does any medical society today run a workshop for new members, an institute at which medical ethics can be discussed and illustrated?

Maybe there ought to be one for old members too. The general public thinks that "medical ethics" are rules of conduct designed, like the stand-by orchestra of Petrillo and the narrow brush of painters, to protect the practitioner rather than the public. Perhaps a rebirth of interest in ethics is now due.

The Automatic Doctor

We have promised to keep you informed about the latest developments in the battle of the machines to take over medical practice. In previous issues we told you about automatic blood counters, belt-line hypodermics, deep-freezes for arterial tissue transplants, self-registering sphygmomanometers, anesthesia machines that turn themselves off when the patient goes too far under, and a number of other robots that do everything but flash on neon lights and play "Yankee Doodle." In line with our policy of making New Jersey doctors ever-abreast of the newest in automation, we beg to report that this spring's crop includes an automatic fog generating machine made by the Melchior Company here in Ridgefield, and a proposed automaton to dispel fog dreamed up by Dr. Lauren Hitchcock speaking before the Air Pollution Symposium. Dr. Hitchcock's robot telemeters weather data, punches the score on cards, feeds the stuff to an electric brain, and then does something or other about it. The Melchior Fog Generator, we are told, will promptly fill any hospital room with fog at any desired temperature and humidity. This editorial is probably the first time in world history that the Melchior Fog Producer and the Hitchcock Fog Eliminator have met in one place.

The J. M. Freed Company of Perkasie, Penna., will now sell you a pre-cleaned microscope slide, so arranged that when you pull it from the container, this one act becomes the equivalent of soaking, bathing, rinsing and drying, which old-fashioned technicians have to go through to clean the slide. The Tasti-Diet Foods Company of Stockton, California has, we are told, some kind of gadget to take care of cheating dieters—some device which does something to or about the patient on a diet who backslides into a nut sundae. (Automatic flaggelator? Automatic emetic? Automatic conscience? Don't ask.)

You can also buy a self-calculating metabolism tester. Made by Liebel-Flarsheim of Cincinnati, this one has dials for age, weight, height and sex, and then when the patient is through breathing, the B.M.R. comes out, neatly, printed, one supposes, like a fortune card at a weighing machine. And right here in Millburn, the Kayden Corporation is making an automatic insulin injector, which puts just the right amount of insulin the right number of millimeters under the skin at the right place. Possibly this could be hooked up to an automatic urine sugar detector. While the other devices may automatize the doctor, this one eliminates him. Members of The Medical Society of New Jersey need not worry. We work while you sleep and will keep you constantly informed of the newest in medical automation. Or we will, if the Trustees will buy an automatic typewriter for the editorial office.*

*Memo to Dr. Blaisdell: We're just kidding — H.A.D.

JOHN H. ROWLAND, M.D.
New Brunswick

Some Aspects of Pulmonary Embolism

It is always wise to consider the possibility of pulmonary embolism in patients who are not doing well after an operation. Diagnosis requires the coordinated use of the electrocardiogram, the x-ray, the laboratory and the clinician's best judgment. For treatment, emphasis is placed on anticoagulants. In this compact monograph, Dr. Rowland gives the reader a run-down of a major complication.

THE incidence of thrombo-embolism is impossible to determine from recent publications. Some give an incidence as low as 0.5 per cent; others as high as 34 per cent. The rate of fatal embolism is in one place given as the low figure of 0.082 per cent; in another as the high figure of 6.6 per cent.[15, 18, 25, 59, 65, 71, 83, 106, 124, 135, 136, 137, 192, 217, 229, 239] Actually there is no such wide divergence of observation as these figures would suggest. Some take as 100 per cent all hospitalized patients. Some use as 100 per cent all patients who have been operated upon. Some include medical and obstetrical patients. Some use old age groups. Others use variously determined groups as a basis for the percentages.

What we have here, then, is a statistical problem. It would be possible to compare the figures if we knew in each instance the ratio which the particular group bore to the whole population. Unless we do know this relationship, we cannot evaluate the facts. It would be helpful if books and articles would express their data in terms of the whole population. Then we could determine with some reasonable validity the true incidence of venous thrombosis, pulmonary embolism, and fatal pulmonary embolism. The whole population, of course, would include patients in the hospital, patients treated at home, and those sufferers from the disease who never see a physician.

It is not easy to determine the true incidence of venous thrombosis or pulmonary embolism. Venous thrombosis occurs in some who never seek medical attention. If they recover (or if the cause of death is not carefully determined) they will never appear in the statistics. Again, home patients and hospital patients are not always examined carefully for venous thrombosis. Scrupulous examination is necessary because the signs and symptoms of the disease are subtly elusive in many cases and are often not easily perceptible.

Any figure given for the incidence of thrombo-embolism must be regarded with caution unless all the facts about the determination of the percentage are known. We need to know whether care is taken by postmortem examination to determine the true cause of death. Without such care the autopsy may miss pulmonary embolism as the true cause of death. When death does not occur, more cases of thrombo-embolism will be recorded when there have been thorough physical examination, constant awareness of the possible presence of the disorder, and facilities for continuous observation for signs and symptoms. Fewer cases will be recorded when patients are treated at home, when observation occurs for only short periods of time—especially in patients in whom the signs and symptoms are fleeting — or even in hospitals whenever busy nurses and preoc-

cupied interns fail to make a scrupulous record of symptoms and signs.[293]

It is not even possible to say whether the incidence of thrombo-embolism is increasing or decreasing. Since this affects older persons, we might reasonably expect the incidence to be on the increase in a time when most people live to be older. Furthermore, because of the relationship of the disorder to trauma, an increase might be expected as a concomitant of more numerous operations and more frequent accidents in industry and in travel. At the same time the incidence may show an apparent increase because more patients are today hospitalized for medical, surgical, and obstetrical conditions. This is especially true of patients past middle age, postoperative patients, and those suffering from cardiovascular disease. In any event there are today no reliable statistics concerning the incidence of thromboembolism.[245,285]

ETIOLOGY

THERE is no single cause which first produces and then loosens the blood clot which causes pulmonary embolism. A number of factors seem to be involved, some necessary and some contributory. The difficulty is to determine which factors must be present and which are merely contributory but not essential.[11,174,211,212,213]

At present we can be fairly certain about three factors *necessary* to the development of pulmonary embolism. There are probably others not yet certainly established. These three factors are :(a) a slowing of the venous blood stream, (b) certain chemical and physical changes in the composition of the blood, and (c) injury to the endothelium of the veins.[76,100,240,242,243,249,256,262,282,287]

Factors *contributing* to the production and loosening of a venous clot include: anemia, dehydration, fluid imbalance, demineralization, obesity, shock, heart failure, surgical complications, injuries (especially fracture of the hip) advanced age, confinement to bed, and blood dyscrasias. This list by no means exhausts the factors which have been reported. It should be added, however, that sometimes venous emboli arise in atypical locations, including thrombosis of the dural sinuses and cerebral vein.[49,56,57,94,96,97,100,145,173,202,205,208,220]

Some authors report that climatic conditions bear a relationship to the frequency of thromboembolism. It is reported as of more frequent occurrence in Boston and vicinity than in the South. Greater frequency is also apparent in the spring and fall, periods of climatic change, and during severe fluctuations of either temperature or barometric pressure, or both.[96,156]

On rare occasions, it is reported, fatal pulmonary embolism has occurred after the small varicose veins of the leg have been injected for cosmetic purposes. Fat embolism also occurs sometimes after bone fractures. One report states that a lead bullet in a shotgun wound caused embolism. It has also been reported that amniotic fluid and retarded blood flow have been causes. Pulmonary embolism arises in the right side of the heart in subacute bacterial endocarditis. Other reported causes include: tight abdominal dressings with subsequent distention, air emboli, following effort and strain, and cancer.[19,28,29,38,39,43,53,56,75,84,99,100,105,108,109,123,133,134,138,139,156,163,178,182,218,223,224,227,228,231,232,238,245,248,250,255,257,258,259,260,267,269,276,277,279,280]

SYMPTOMS AND FINDINGS

THE symptoms of *venous thrombosis* are sudden, persisting, restricting, boring, aching, burning pains or tightness located in the calf of the leg. Some authors insist that venous thrombosis is symptomless.[49,71,89,100,285]

The symptoms of *pulmonary embolism* are: dull pain in the back of the neck or in a shoulder, followed by pain in the axilla or sharp stabbing uncontrollable pain in the right side of the chest, radiating to the neck; tightness in the chest; precordial pain; cough with or without precordial pain; blood tinged sputum; pleuritic pain; shortness of breath; weakness; epigastric discomfort (associated with nausea and vomiting) and feeling of impending disaster.[2,49,71,89,100,107,156,183,184,185,225,266,274,285]

The physical findings of *thrombosis of the veins of the legs* include: edema of the foot and leg, increased firmness of the calf on palpation, tenderness in the calf, increased thigh tenderness, pain in the calf on dorsi-flexion of the foot (Homan's Sign), increase in the measurement of the circumference of the calf, decreased femoral artery pulsations compared to the opposite side, and red, hot, tender, and painful "cords" in the course of the vein.[50,261]

The physical findings of *pulmonary embolism* include: rise in temperature (low grade), tachycardia, feeble pulse, state of shock, pallor or ashen color, anemia, cyanosis, sweating, dyspnea, orthopnea, tachypnea, low blood pressure, blood-tinged sputum, engorgement and pulsation of the jugular veins, increased prominence and pulsation on inspection and palpation over the second and third left intercostal spaces near the sternum, faint systolic murmur over the second and third intercostal spaces with accentuation of P-2, gallop rhythm over the left sternal border, unilateral rales, consolidation of the lung, pleural effusion, friction rub over the second and third intercostal spaces.[5]

Laboratory findings of *pulmonary embolism* include: leukocytosis, increased blood sedimentation time, increased viscosity of the plasma, variable hemo-concentration, hyperglobulinemia, increased fibrinogen, more numerous and more firmly adhering blood platelets, increased bilirubin, and elevated icteric index.[191,200,201]

X-ray findings of *pulmonary embolism* include: increased hilar shadows, dilatation of the pulmonary artery, evidence of pulmonary infarction (such as a triangular shadow at the junction of two pleural surfaces), evidence of pleural effusion, transient clearing or avascularity of the normal shadow of the pulmonary tree distal to the embolism.

The electrocardiogram may show development of a broad S_1 and depression of RS-T_1 and RS-T_2 with "staircase effect," lowering of T_3, development or deepening of Q_3, inversion of T_3 with elevation of RS-T_3, inversion of T waves over the right ventricle, shift of the transitional zone to the left, development of an R or R' Wave in the unipolar right arm lead, and transitional incomplete right bundle branch block. These findings are not all always present. However, the electrocardiogram may show enough of the findings to make a positive diagnosis possible. It has been estimated that these findings occur in from 10 to 25 per cent of cases. When they are present, they are very significant.

Electrocardiographic findings associated with pulmonary embolism are present only when the embolism affects the heart and produces acute cor pulmonale. A single electrocardiogram might fail to give findings indicating pulmonary embolism producing acute cor pulmonale. But this is to be expected when it is realized that electrocardiographic findings do not last long. If, however, a series of electrocardiograms were to be taken at sufficiently frequent intervals, positive electrocardiographic findings would probably be present in every case of pulmonary embolism producing acute cor pulmonale.[1,2,3,9,17,20,30,41,64,180,181,219,221,222,284,288]

DIAGNOSIS

THE diagnosis of venous thrombosis is made readily on the basis of characteristic symptoms and signs. For consistent results, diagnosis calls for careful examination of the patient at frequent intervals. This is especially necessary in patients whose general condition might suggest the possibility of venous thrombosis. No matter how thoroughly the diagnostician is acquainted with the signs and symptoms of pulmonary embolism, he must also be keenly aware of the necessity for constant watchfulness. Too often the signs and symptoms are subtle and fleeting. He will need to make use of all aids to diagnosis, including complete blood count, blood sedimentation, platelet count, prothrombin time, hematocrit, blood chloride, icteric index, x-rays of heart and lungs, and electrocardiograms.[4,5,6,14,42,44,46,52,54,55,63,101,168,270,271,272,273,282]

Pulmonary embolism may be confused with pneumonia, pleurisy, acute heart failure, atelectasis, spontaneous pneumo-thorax, coronary heart disease and vasomotor collapse. It may resemble manifestations referable to the cen-

tral nervous system, such as unconsciousness, syncope, convulsions, tachycardia, fever of unknown origin, and sudden death.[7,28,33,51,52,88,89,91,115]

PROPHYLAXIS AND TREATMENT

MEASURES to control venous thrombosis are the first step in the treatment of thrombo-embolism. The patient should stop smoking. He is advised against forced expiration. Bed-pan and toilet-room deaths in patients with myocardial infarction are probably due to thrombo-embolism. Every effort should be made to correct obesity and to prevent anemia, dehydration, demineralization, and infection. When surgery is involved, care should be taken to avoid poor anesthesia, prolonged operations, surgical trauma, and pressure trauma. Treatment of varicosities in the lower extremities should begin as soon as possible, with proper care of the feet, elastic bandages for the legs, and elevation of the foot of the bed. Other prophylactic measures include avoidance of prolonged bed rest, the use of extract of thyroid, postoperative deep-breathing exercises, and early postoperative mobilization.[22,45,72,85,87,90,96,109,110,111,113,145,147,158,159,160,161,162,207,208,209,210,244,283]

Prophylaxis can be made more complete by the use of anti-coagulants and venous ligation. One may hesitate to use these treatments to *prevent* venous thrombosis. But when venous thrombosis is already present, both anti-coagulants and venous ligation are indicated, unless, of course, there are contraindications, especially for the anti-coagulants. Contraindications for the use of anti-coagulants include: hepatic insufficiencies, blood dyscrasias, active pulmonary tuberculosis, purpura, hepatogenous jaundice, and bleeding ulcerations.

Of the anti-coagulants commonly used, heparin is perhaps the most satisfactory. On the basis of unit cost another anti-coagulant may be less expensive. But since it ordinarily requires a longer time, the over-all cost of heparin is lower. Besides, not only does the anti-coagulant effect of heparin occur sooner, but also, when hemorrhagic complications arise, the withdrawal of heparin is soon followed by normal coagulation.

Heparin may be given intravenously or subcutaneously. For intravenous administration the first dose may be 100 to 150 milligrams. This treatment may be continued at a dosage of 50 to 75 milligrams daily, or more often, as suggested by coagulation time (as determined by the Lee White Method), which should be maintained at 18 to 20 minutes.

For subcutaneous administration heparin is best used with hyaluronidase (such as Alidase®, Searle, small serum-type ampule-powder in 500 cc. of physiologic saline). Two cubic centimeters of hyaluronidase are injected subcutaneously, and then without removing the needle the heparin is administered. From 25 to 100 milligrams of heparin may be given by this method every 4, 5 or 6 hours, the frequency depending upon the time of coagulation.

Other anti-coagulants may also be used. Dicumarol* is given by mouth at the rate of 300 milligrams the first day, 200 the second day, and 100 the third day. Thereafter a maintenance dose of 50 to 100 milligrams is given daily, depending upon the daily prothrombin time. This should be maintained at the optimum of 35 seconds, or 20 to 30 per cent of normal prothrombin time. There are other and newer anti-coagulants which may be used. Also sometimes heparin is used in conjunction with Dicumarol* for the first 48 hours.[40,70,78,117,118,119,120,121,127,132,140,141,142,143,144,146,148,149,167,172,175,176,187,189,204]

Anti-coagulants should not be stopped suddenly. This is especially true in patients discharged from the hospital with inoperable or postoperative carcinoma, especially of the pancreas and stomach. Otherwise, the patient may develop not only venous thrombosis but also arterial thrombosis.

Bilateral ligation of the major veins in the lower part of the body (inferior vena cava—superficial femoral veins) has been used prophylactically both when venous thrombosis is present, and more especially, when pulmonary

*Dicumarol is a collective registered tradename adopted by the Wisconsin Research Foundation for bi-hydroxy coumarin.

embolism has occurred. Ligation may be accompanied by anti-coagulants.[17,21,22,23,24,26,32,36,37,48,58,59,60,61,62,66,67,68,69,92,93,95,98,102,103,104,112,114,116,122,128,129,130,131,150,151,152,153,234,251,253,275]

When massive pulmonary embolism has occurred, serious consideration should be given to pulmonary embolectomy (Trendelenburg operation). This operation often saves lives. It usually must be carried out on short notice. An expert team must be prepared to operate without delay, inasmuch as the patient is in a very critical state and may expire very soon.

Other measures proposed for the treatment of thrombo-embolism include: thrombectomy (when localized either by the use of venography or otherwise); stellate block (only when facilities are optimum), regional sympathetic ganglion block (not used when the patient is taking anti-coagulants), oxygen (intravenous or by inhalation), quinidine sulfate (3 grains every three hours, to prevent ventricular fibrillation), papaverine (½ grain intravenously every four hours), atropine (grains 1/50 every four hours), morphine sulfate (grains ¼ every four hours).

COMMENT

MUCH can be done to improve the diagnosis and treatment of thrombo-embolism. Although some say that thrombo-embolism can occur without signs or symptoms, it is more likely that the proper means of detecting the signs or symptoms have not been used. First, it is necessary to anticipate them, to consider always the possibility of pulmonary embolism in patients who are not doing well, especially after operations, and in patients with heart disease. Next, every facility for diagnosis should be utilized: frequent electrocardiograms, x-rays, and laboratory findings.

Emphasis needs to be placed on anti-coagulants both as prophylactic and as therapeutic measures. All other means of counteracting spasm of the pulmonic tree should be used. Mass pulmonary embolism is often preceded by small emboli which invade the lung and give some warning of what may follow. When pulmonary embolism occurs, anti-coagulants can do little. Then it is best to undertake venous ligation, especially if the source of the embolism can be determined and whenever pulmonary embolism occurs in patients who have been presumed to be under control with anti-coagulants. Bilateral ligation is definitely indicated in venous thrombosis whenever anti-coagulants are contraindicated, and especially in patients who are presumably more susceptible to thrombo-embolism. If diagnosis is made early and treatment is begun early, we may expect better results.

159 New Street

A master bibliography of 288 citations appears in Dr. Rowland's reprints.

Burton M. Cohen, M.D.
Elizabeth

Cryptenamine Plus Reserpine in the Office Treatment of Hypertension

Preliminary Observations in Eleven Patients*

Ambulatory office treatment of hypertensives can be helped by administering a combination of a veratrum viride derivative and a form of one of the newer rauwolfia products. The headache was the symptom most effectively relieved.

Cryptenamine, a new alkaloid prepared from veratrum viride has been reported[1] as a moderately potent oral hypotensive agent suitable for the office treatment of arterial hypertension. Side effects were mild and transitory. Emesis, noted with other veratrum derivatives in high frequency at therapeutic dosage, was infrequent. Subsequent studies[2] in a larger number of patients have confirmed these early findings. Recently, it has been widely demonstrated that derivatives of rauwolfia serpentina, a medicinal tropical and subtropical plant, may act in additive or synergistic fashion with more potent hypotensive drugs, at the same time exerting a moderating influence on the side reactions to the latter.[3] It was, accordingly, decided to treat an additional group of patients with a combination of cryptenamine and reserpine, an alkaloid derived from rauwolfia.

A group of 11 ambulatory clinic patients began with cryptenamine therapy to which reserpine was later added. Ten patients were suffering from "essential" hypertension, and the eleventh from hypertension complicating polycystic disease of the kidney. The patients ranged in age from 34 to 77 years, with a mean of slightly under 55 years. Hypertension had been known to these patients for a mean of 6½ years, with extremes of 2 and 22 years. Preliminary observations were available for periods of 1 month to 2 years, averaging 13 months for the entire group. All patients had previously received diets containing less than 1 Gram of sodium daily, as well as trials of the barbiturates. Six had received treatment variously with hydralazine, the rice diet, or other rauwolfia and veratrum derivatives. Prior to this specific drug therapy all patients had diastolic pressures persistently at or above 110 millimeters. Azotemia of moderate to severe degree was present in five. All patients fell into Smithwick groups[4] 3 and 4.

Initial and serial studies included history and physical examination, funduscopic evaluation, urinalysis, hemogram, sedimentation rate, electrocardiogram, postero-anterior roentgenogram of the chest, blood non-protein and urea nitrogen determinations, and, in some cases, more discrete evaluation of renal function using common clinical tests. All patients were seen on the same day each week at about the same hour. Blood pressures and pulse rates

*From the U.S. Public Health Service Outpatient Clinic, New York 13, N. Y. Dr. Cohen was Chief, Medical Services, Outpatient Clinic, of the U. S. Public Health Service in New York at the time this work was prepared.

were recorded in the seated position following a period of casual conversation.

Treatment consisted of continuation of the low-sodium intake and adjunctive measures previously received. Two-milligram tablets of cryptenamine,† containing veratrum viride alkaloid equivalent to 260 CSR Units‡ per tablet, were used. Treatment was begun with two tablets daily, one immediately after breakfast and one at bedtime. Later a 2 p.m. dose was added. The daily dose was gradually increased at the rate of one tablet every 5, 6 or 7 days, with the final total adjusted so that the smallest dose was taken in mid-afternoon and the largest at bedtime. Patients were urged not to eat for at least four hours after each dose in an attempt to minimize or preclude possible gastro-intestinal effects. When the maximal blood pressure response had been obtained (or if limiting side effects appeared) with cryptenamine alone, reserpine[7] was added. The initial dose of reserpine[7] was one milligram given either as a single dose or in divided doses with the cryptenamine and later revised according to the observed response.

RESULTS

THE duration of combined treatment was 3½ to 9 months. Six patients received cryptenamine-reserpine for six or more months, and only one patient for less than 4½ months. In no instance was it necessary to discontinue treatment. Average daily dose of cryptenamine ranged from 10 to 16 milligrams, and of reserpine[7] from .01 to 1.0 milligrams. Therapy with cryptenamine alone was marked by a decrease in the average mean blood pressure[8] from 151 (210/121) to 134 (184/110), but after reserpine[7] was added there was an additional reduction to 123 (170/99) (Table 1). Stated differently, only one patient had a decrement in diastolic blood pressure of more than 20 millimeters below the initial treatment level while receiving cryptenamine alone; whereas six patients (54 per cent) had such a drop on combined treatment. Similarly, two patients (18 per cent) had a systolic blood pressure decrease of more than 30 millimeters on cryptenamine alone, as compared with eight patients (73 per cent) receiving both drugs (Table 2). A decrease in pulse rate was characteristic of the response of the group as a whole. But in individual instances the pulse deceleration could not be correlated with the observed hypotensive effect, some of the more profound decrements being observed with little change in heart rate.

Subjectively, seven of nine patients with "characteristic" hypertensive headache ex-

TABLE 1. PHYSIOLOGIC RESPONSE TO THERAPY

Age	Smithwick Group	Main. Dose(Mgm.) Cryp.	Res.	Mean B.P.[9] C[10]			Blood Pressure Cryp.[11]	Cryp.-Res.[12]	
34	4	12	0.1	152	130	117	195/130	170/110	160/95
50	3	16	1.0	146	150	146	200/120	190/130	200/120
65	3	12	0.25	145	127	132	205/115	170/105	175/110
77	4	12	0.6	156	126	121	210/130	190/94	170/96
62	3	14	0.25	160	130	120	250/115	190/100	170/95
58	3	12	1.0	160	145	128	220/130	195/120	175/105
51	3	16	0.25	141	136	120	205/110	190/110	180/90
41	4	12	0.2	151	136	125	215/120	190/110	175/100
60	3	12	0.75	146	138	110	200/120	185/115	150/90
50	3	10	0.75	160	140	123	220/130	190/115	160/105
56	3	12	0.5	145	123	113	195/120	170/100	160/90
—				—	—	—	—	—	—
55				151	134	123	210/121	184/110	170/99

9. Mean B.P. equals diastolic plus one-third of the pulse pressure
10. C.—Control observations
11. Cryp—Observations after cryptenamine administration
12. Cryp-Res.—Observations after cryptenamine plus reserpine

pressed improvement. In one patient, overt congestive heart failure "cleared" coincident with a dramatic lowering of the blood pressure, and digitalization was not required.

TABLE 2. CHANGES IN BLOOD PRESSURE WITH THERAPY

Diastolic blood pressure fall in millimeters	On cryptenamine alone	On cryptenamine plus reserpine
0 to 20	6	2
11 to 20	4	3
more than 20	1	6
All subjects	11	11
Systolic blood pressure fall in millimeters		
Under 10	1	1
11 to 20	3	0
21 to 30	5	2
Over 30	2	8
	11	11

These blood pressures were all taken in a sitting position

TABLE 3. SIDE REACTIONS TO THERAPY

This is expressed as the number of subjects (out of the total of eleven) experiencing the indicated effect.

	To cryptenamine alone	To cryptenamine with reserpine
A. No side effects	5	8
B. Some side effects	6	3
Nausea	4	0
Vomiting	1	0
Flatulence	1	1
"Heat" reaction	0	2
Urinary frequency	1	0
"Nervousness"	2	0

TABLE 4. CHANGES FOLLOWING TREATMENT OF ARTERIAL HYPERTENSION WITH COMBINED CRYPTENAMINE-RESERPINE

(After 3½ to 9 months of treatment)

Numerals indicate number of patients experiencing the indicated change.

	Heart size	EKG	Fundi	Urine	NPN
Improved	1	0	1	5	3
Same	10	11	10	6	2
Worse	0	0	0	0	0

The last column (NPN) means "out of five subjects with nitrogen retention."

SIDE EFFECTS

On cryptenamine alone five patients were free of symptoms which could be traced to therapy; side reactions in the others consisted of nausea, flatulence, an ill-defined "nervousness" and urinary frequency. One patient vomited. The addition of reserpine [7] eliminated gastro-intestinal and emotional side reactions without necessitating revision of cryptenamine dosage, with a single exception. On combined therapy two patients experienced a marked hypotensive effect beyond the treatment "base-line" during periods of unusually high environmental temperature. This was attributed to sodium loss with profuse perspiration and was controlled by adding salt to the diet for the next several days. See Table 3.

Laboratory Findings: The initial base-line studies were duplicated in all patients. Heart size, electrocardiogram and fundi remained unchanged for the most part. The urinalysis was the same in 6 and better in 3. The blood nonprotein nitrogen improved in 3 of 5 patients with nitrogen retention and remained unchanged in two. See Table 4.

COMMENT

The response of these eleven ambulatory patients with moderately severe arterial hypertension to oral cryptenamine therapy is confirmatory of my previous report,[1] in that a modest but definite decrement in systolic, diastolic and mean blood pressure was recorded. The addition of reserpine,[7] a pure crystalline alkaloid of rauwolfia serpentina, to the basic cryptenamine regimen was associated with enhancement of the hypotensive response. Side reactions, noted by slightly more than half of the patients during treatment with cryptenamine, were largely eliminated by the two drugs in concert. These results are in accord with those of others using different derivatives of rauwolfia and veratrum in combination.[8] The most dramatic side effect of the combined regimen was a marked additional drop in blood pressure during periods of high environmental temperature. Similar phenomena have been recorded with other hypotensive agents and are not peculiar to the particular substances herein employed.

Symptomatic improvement was limited to the alleviation of hypertensive headache in most, and the resolution of the symptoms of congestive failure in a single patient. Objective evidence of improvement in heart size, electrocardiographic findings and ocular fundi are lacking to date. Abnormal urinary findings have improved in one-third, and a decrease in nitrogen retention has followed a decline in blood pressure in most of the small number with initial abnormality.

These patients were not hospitalized during the period of treatment. Office management and regulation were feasible and safe. Baseline and followup studies were conducted using standard clinical equipment and conventional clinical laboratory tests.

CONCLUSION

RESERPINE,[7] a rauwolfia alkaloid, enhanced the anti-hypertensive properties of cryptenamine, a new veratrum viride alkaloid, and at the same time moderated side reactions to the latter, as determined in the office treatment of eleven ambulatory hypertensive patients observed for periods up to nine months of combined therapy.

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[7] Reserpine was given in the form of Serpasil® Ciba.

[8] Mean blood pressure was calculated as diastolic plus one-third of the pulse pressure.

†Made available as "Unitensen" by B. A. Marty, Director of Clinical Research, Irwin, Neisler & Co., Decatur, Illinois.

‡One CSR (Carotid Sinus Reflex) Unit "represents the amount of intravenously administered hypotensive agent per kilogram of body weight which abolishes the pressor response to the carotid sinus reflex in dogs."[5]

Joseph A. Smith, M.D.
Glen Gardner

Tuberculosis As a Gynecologic Complication*

In this highly practical article, Dr. Smith discusses the problem of tuberculosis in pregnant women, and reviews some of the gynecologic disorders associated with tuberculosis.

The past several years have been noteworthy in tuberculosis control. New medicines, improved surgical technic, a more thorough knowledge of the basic sciences have all helped to reduce deaths from tuberculosis. However, tuberculosis is still the first cause of death from infectious disease in the age group 15 to 34 years.

The prognosis in minimal tuberculosis adequately treated is uniformly good. As the extent of disease increases, the prognosis worsens. It is necessary then to find the early case if we are to save life. This is best done by screening surveys. A survey[15] of 2,513,000 veterans and 704,000 employees of the Veterans Administration uncovered 12,740 cases of active tuberculosis, 85 per cent of which were in the minimal stage. Routine photoroentgen examination of the chest in the ante-partum clinic in New York Lying-In Hospital increased the incidence of recognized tuberculosis three times. The incidence of tuberculosis at this hospital is greater than that of syphilis.[13] The proportion of active cases discovered by this method at Boston City Hospital Prenatal Clinic[3] is about the same.

Once the diagnosis of active tuberculosis is established, the patient should be urged to enter a sanatorium. Although some clinicians have reported on ambulatory treatment of pulmonary tuberculosis and the conversion of sputum, there is a period during which the patient continues to be a carrier and there are many who are never converted. We see many patients treated at home for a considerable time who finally enter the sanatorium still infectious and perhaps unsalvageable.

Two procedures are basic in the treatment of pulmonary tuberculosis: (1) Bed rest and general hygienic measures continue to be the foundations of treatment; (2) All cases of active tuberculosis should be treated with a combination of the specific anti-tuberculosis drugs (antimicrobials) in order to delay or avoid the emergence of drug-resistant tubercle bacilli. Once a regime is instituted, it usually should not be interrupted until the maximum benefit is obtained. It should be altered only for good cause, for example toxic reactions or drug resistance.

The drugs in common usage are streptomycin, dihydrostreptomycin, paramino-salicylic acid or its salts (sodium or potassium), and isoniazid. At Glen Gardner, we usually administer one Gram of streptomycin or dihydrostreptomycin twice weekly and twelve Grams of PAS† daily. However, in the seriously ill patient, a preliminary course of streptomycin daily is of definite benefit; and after four to six weeks of this treatment we revert to our twice weekly schedule.

As an alternate we substitute 300 milligrams of isoniazid daily for the streptomycin drugs.

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†Para-amino-salicylic acid.

More rarely a combination of streptomycin and isoniazid is used. Very rarely a combination of all drugs is given. We attempt to individualize the type and duration of treatment. Our present plan is antimicrobial therapy of some type for the duration of hospital residence plus four or more months following discharge. This is purely empirical. To change from one drug to the other "willy nilly" leads more readily to emergence of drug resistant bacilli.

After several months of the rest and drug regime the patient's case is reviewed to observe results and determine if definitive surgery is needed. This depends on the presence of open cavities and positive sputum, or the presence of residual nodes or nodules.

If cavitation persists, the sputum is positive and the bacilli are resistant. This usually calls for surgical treatment. Surgical excision has replaced collapse procedure to a great extent. Perhaps we have abandoned a proved procedure too hastily. Heretofore we attempted to collapse the cavity; present practice generally in use is excision of the cavity either by segmental resection (one or more segments), lobectomy or pneumonectomy. The extent of operation depends on the extent of the pulmonary involvement.

The residual nodule is removed by wedge resection. (One or more wedges). This nodule is often the focus for future spread of the disease. Nodules resected following adequate drug therapy show areas of necrosis often with bronchial communications. These areas often contain tubercle bacilli demonstrable by smear but occasionally not culturable. At times the organism is not demonstrable by laboratory procedures now in use.

Ten year follow-up studies of thoracoplasty showed arrestment in 70 or more per cent of the cases.[1] The report on comparative results of thoracoplasties and resections in the same clinic over the same period present no great statistical variation.[6]

Artificial pneumothorax has been largely replaced because of serious complications reported at many clinics. (Empyema, bronchopleural, fistula, unexpandable lung). These complications were never a serious matter in our hands. I think that the complications are the results of faulty application of the procedure rather than the fault of the procedure itself. We have used it numerous times to "cover" pregnancy in active and inactive tuberculosis cases.

TUBERCULOSIS IN PREGNANCY

Tuberculosis in the pregnant woman should be treated as a coincidental pathologic process during a physiologic episode. The tuberculosis process should be treated according to the concepts outlined briefly above, and no differently than the tuberculosis process in the non-pregnant female. Tuberculosis is not a contraindication for the continuation of pregnancy. The tuberculosis should be treated by the phthisiologist and the pregnancy supervised by the obstetrician.

Some clinicians[11] have stated that pregnancy has a deleterious effect on tuberculosis and that the prognosis of the pregnant tuberculous female is worse than the non-pregnant tuberculous female. The weight of evidence,[7] however, is against this belief and indicates that if the tuberculosis is recognized and treated,[8] the prognosis is not adversely affected;[9] and deleterious effects of pregnancy on tuberculosis must be attributed primarily to the lack of proper tuberculosis therapy.[10] Therapeutic abortion does not alter the long term prognosis of pulmonary tuberculosis. Analysis of results in the same clinics[13] show that mortality is lower in patients allowed to continue to delivery (full term or premature) than in those patients subjected to therapeutic abortion.[14] In the New York Lying-In Hospital, 32 per cent of all tuberculosis patients subjected to therapeutic abortion were lost to follow-up in one week and an additional 12 per cent were lost within three months; while only 16 per cent of the patients who came to delivery were lost to follow-up in the first three months. This might make one think that tuberculosis is used as an excuse for, rather than as a reason for abortion. Perhaps an important benefit of con-

tinuing pregnancy is the prolonged medical supervision needed during the antepartum and postpartum period. In this same report[13] of practices over a twenty-year period, the incidence of therapeutic abortion has decreased from 23 per cent during the period 1932 to 1937 to 0 per cent in the last 3 years.

THE various collapse procedures may be used where indicated in the treatment of the pregnant woman. Many clinicians believe that pregnancy may progress with greater security because of collapse therapy. Before the various antimicrobials were available it was the custom in many clinics to initiate collapse therapy as soon as possible to "cover" the pregnancy. Results in the pregnant tuberculous female using collapse therapy have been especially good.[17]

Pulmonary resection is usually not an emergency measure. It best follows a long course of antimicrobial therapy while we await maximum improvement of the pulmonary lesion so that interference with pulmonary function and the area of sacrificed tissue will be at a minimum. It is usually not done during pregnancy.[2] However, it is not contraindicated.[15]

The inactivation of the disease is obtained in many cases at the expense of pulmonary function. This is especially so when the patient is subject to collapse or excision therapy. The question arises: is it safe for these patients with inactive pulmonary tuberculosis and limited pulmonary reserve to bear children? Pregnancy itself does not prevent normal maximal expansion of the lungs[1] and pulmonary function remains unchanged throughout its course. Patients with "restrictive" ventilatory insufficiency, who are not dyspneic at rest, should tolerate pregnancy without great difficulty.[5] (This does not apply to patients with obstructive ventilatory insufficiency). We have conducted patients through pregnancy with only one functioning lung, with no untoward results.

The various antimicrobials cross through the placenta. To date, we know of no untoward effect in the fetus. Limited studies[14] suggest that streptomycin has no toxic neurologic effects on the fetus.

INTERRUPTION OF PREGNANCY

SINCE 1946, we have not interrupted pregnancy for active or inactive pulmonary tuberculosis. We have, during that time, treated 20 pregnant women with active pulmonary tuberculosis. Five were far advanced. Three of these five are well and show no progression of the disease. One, a case of miliary tuberculosis discovered in the third trimester of pregnancy, died soon after delivery. One has shown progression of the tuberculous process. Nine were moderately advanced, and have had satisfactory recovery. Five cases were minimal. One aborted spontaneously; the remaining four have had satisfactory recovery. The one case showing progression improved under sanatorium care. Following delivery she disappeared temporarily and discontinued therapy. She returned several months later with progression of disease. In the one patient who died, the pregnancy had no effect on the outcome of the disease, which was of a far advanced miliary type discovered in the third trimester of pregnancy previous to the use of antimicrobials.

Eight patients received artificial pneumothorax during and after completion of pregnancy. Five patients were on routine sanatorium care only, and seven patients were on the antimicrobials throughout and following pregnancy. In each case the patient's tuberculosis was treated energetically according to the accepted methods at the time; and at or about the time of delivery the patient was referred to her obstetrician. Treatment was continued, and following delivery the patient was readmitted to the sanatorium.

Inactive pulmonary tuberculosis *per se* is not a barrier to marriage. Pregnancy should not be advised until the disease has been inactivated for at least one year. This waiting period allows the phthisiologist to evaluate the stability of the disease. Delivery should be normal; necessary procedures for expediting the second stage may be indicated, (episiotomy, low forceps). The infant should not be nursed by the mother. The probability of infection from an active tuberculous mother is evident; the possibility from an inactive tuberculous mother should be avoided.

GYNECOLOGY

Pulmonary tuberculosis is not a contraindication to any emergency surgery. Emergency gynecologic measures may be undertaken at any time. Elective surgical measures should be deferred until inactivation of the pulmonary lesion.

The incidence of extra-pulmonary tuberculosis had decreased previous to the introduction of antimicrobial therapy. When this latter therapy became available the decrease was drastic. Most cases of genital tuberculosis are secondary to organ or glandular tuberculosis elsewhere in the body.

The antimicrobials have changed treatment of all tuberculosis. Sered, *et al.*[18] in 1952 reviewed 27 cases of genital tuberculosis (tuberculous peritonitis was always present, salpingitis was present in 24 cases and endometritis in 16 cases), and recommended surgical extirpation of the diseased tissue, when possible, as the treatment of choice. In 1953 the same authors reported[19] 18 cases that had the benefit of streptomycin and PAS† therapy for four months. Results were good. Surgical intervention was found not necessary in fifty per cent of the cases. They believed that in the more advanced forms of genital tuberculosis, extirpation was necessary. At that time, protocol called for only four months of streptomycin therapy and isoniazid was not available. I think with the present protocol of prolonged streptomycin therapy (one year or more), and the additional benefits of isoniazid, our medical results will improve.

We have seen but six cases of tuberculosis of the reproductive organs in the past five years. One was treated by hysterectomy. Five were treated with the antimicrobials and have recovered. Two of these have become pregnant and the obstetrical course has been uneventful.

Just as in pulmonary tuberculosis the antimicrobials should be administered intensively and for a prolonged period in tuberculosis of the reproductive system. When the maximum benefit is obtained, if there is any residual it may or may not be extirpated. This would result in a minimum sacrifice of reproductive tissue and retain in a great many cases the female reproductive function.

SUMMARY

1. Diagnosis of pulmonary tuberculosis in its early stages is important for the best therapeutic results.

2. Routine chest roentgenograms of all antepartum cases at the time of the first consultation is the best means of discovering the early unsuspected case. The x-ray should be repeated later in pregnancy and following delivery. Yearly chest x-rays are a requisite of good public health.

3. Early intensive treatment of all active tuberculosis is indicated. The therapy of pregnant tuberculous females is the same as the therapy of non-pregnant tuberculous females.

4. Antimicrobial therapy is a requisite of active tuberculosis regardless of site. The intensive and judicious use of these drugs results in salvage and restoration of tissues which heretofore were regarded as irreparably destroyed by the tuberculous process.

5. Therapeutic abortion is not indicated in the pregnant tuberculous female.

The New Jersey Sanatorium

A bibliographic reference list of 19 citations will be found in the author's reprints.

MILTON R. BRONSTEIN, M.D.
Fords

Transitory and Orthostatic Proteinuria*

Incidence, Occurrence and Possible Etiology

Proteinuria does not necessarily mean disease, and a wise insurance examiner does not summarily cause the rejection of an applicant with proteinuria. In this survey, Dr. Bronstein finds that proteinuria can occur in 1 per cent of presumably healthy men.

PROTEINURIA[1] on routine urine examination presents a problem in the army[2,3,3a] as well as in the physician's office.[4] This study deals with the incidence, occurrence and possible etiology of proteinuria when no other evidence of renal disease is found after medical study. The subjects were normal males being given the army "final-type" physical examination.

Proteinuria[5] is common in many pathologic states[6] such as arteriosclerotic kidney, glomerulonephritis, heart disease, nephrosis[7] of varied etiology, toxemia of pregnancy, subarachnoid hemorrhage,[5,6,7] and so forth. Proteinuria has also been found in the absence of renal disease and called adolescent, postural, orthostatic, benign, functional, intermittent and physiological. If no disease was found, the protein is attributed to some minor disorder of renal physiology rather than to structural change in the kidney.[6] Proteinuria has also been found after administration of antibiotics.[8] Shannon[9] reports orthostatic proteinuria disappearing after recovery of sinusitis, and Schreiber[10] speaks of the psychophysical aspect of orthostatic proteinuria.

METHOD

THE incidence of proteinuria was determined in a group of enlisted men and officers being discharged from the army for other than medical reasons. This included individuals receiving promotions, being activated from inactive status, those getting annual physical ex-

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aminations, and a small number whose records were lost. It was assumed that this was a relatively normal group since they had been accepted for service two years or more previously. In the interim any who contracted disease or disability should have been treated or discharged prior to this examination.

This "final type" examination was conducted by having the subjects walk from one "station" to the next. At each, they were checked for various diseases or complaints. Blood for serology was taken at the first station. This was followed by eye examination, and recording of height and weight. Urine was then examined. Then a chest x-ray was taken. The subjects continued to various stations, ending at the final "check point" where any defects were evaluated. There the men received their final profile. If, at this point proteinuria was found, the subject was questioned for previous renal diseases, previous physical examinations, urethritis, and prostatitis. Here too, he would be asked if he felt weak, dizzy, or fainted while the blood specimen was drawn. He would then have a second urinalysis with specific gravity and microscopic studies. If this was positive, a rectal examination was done. The subject was instructed to pass urine prior to sitting up in bed the next morning. He returned the next morning with the specimen labeled "A" and passed another specimen, labeled "B." Both specimens were checked for proteinuria, and for specific gravity. The disposition of cases is reflected in Table 1. Any subject who had symptoms, positive physical findings or an abnormal microscopic examination was sent to the hospital for further evaluation. Any combination of tests with a prostatitis (other than cases to be hospitalized or "orthostatic" cases) were labeled *prostatitis with transitory proteinuria.*

If the soldiers had reached their expired term of service date, they could not be held for further study unless they assented. Hospitalized patients were studied in detail, including urinalysis, intravenous pyelogram, blood urea nitrogen, nonprotein nitrogen and any other studies indicated.

TABLE 1.

Specimen 1	Specimen 2	Specimen 3(A) Ortho	Specimen 4(B)	Disposition
pos	neg	——	——	Transitory Proteinuria (cleared)
pos	pos	neg	pos	Orthostatic Proteinuria (cleared)
pos	pos	pos	neg	Transitory Proteinuria (cleared)
pos	pos	neg	neg	Transitory Proteinuria (cleared)
pos	pos	pos	pos	To Hospital for further evaluation

LABORATORY EXAMINATIONS

The first test for proteinuria was done with 20 per cent sulfosalicylic acid. To speed the examination, a drop at a time of the sulfosalicylic acid was dropped into the entire contents of the specimen bottle with urine. If a small precipitate formed when the sulfosalicylic acid reached the urine the specimen was labeled "positive" and graded trace to 4-plus If the specimen before testing was cloudy, part of it was transferred to a test tube and the test performed, using 2 cubic centimeters of urine to 4 drops of sulfosalicylic acid.

On the recheck and on all following specimens, the test tube method was used with sulfosalicylic acid and heat and acetic acid. If the heat and acetic acid test was negative, the subject was "cleared." The specific gravity on all repeated specimens was reviewed to see if it was 1.015 or over. Anything below 1.015 may show a negative test with some protein present. All "recheck positive" specimens were centrifuged and studied microscopically.

RESULTS

Lyall [3] found that 0.5 per cent of his subjects showed proteinuria on more than one occasion when examined for entry into the

services. His 110 cases were divided into 5 groups:

Orthostatic albuminuria	31
Albumen without evidence of nephritis	22
Subacute nephritis	14
Chronic or subchronic nephritis	31
Urinary infections, haematuria, various	12

TABLE 2.

INCIDENCE OF PROTEINURIA

Subjects	No. of proteinuria	% Proteinuria of total examined
20,344	203	1 per cent

	Proteinuria	Number		% of total proteinuria	% of total men examined
I.	Transitory	169		83.3	0.83
			(% of Transitory)		
	Dizziness or fainting	10	5.91	4.9	0.05
	Prostatitis	4	2.37	1.97	0.02
	Prev. history of Proteinuria	5	2.96	2.46	0.02
	Prev. history of RBC	1	.59	0.5	0.005
	Hypertension	1	.59	0.5	0.005
	Hist. of chest fungus dis. (PEneg.)	1	.59	0.5	0.005
	CaOxolate crystals (urine)	2	1.18	1.	0.01
	Abnormal microurinalysis with normal workup	2	1.18	1.	0.01
II.	Orthostatic	25		12.3	.012
			(% of orthost.)		
	Prev. history orthostatic	2	8.0	1.	0.01
	Dizziness	1	4.0	0.5	.005
	Prostatitis	1	4.0	0.5	.005
	Abnormal microurinalysis with normal workup	1	4.0	0.5	.005
III.	Undiagnosed (ETS reached)	7		3.5	.034
	Prev. history proteinuria	2		—	——
	Urethritis	1		—	——
	Prostatitis	1		—	——
IV.	Disease	2		1.	0.01
	Suspect renal tumor	1			
	Suspect chr. nephritis	1			

V. Positive sulfosalicylic acid and negative heat and acetic acid 3
(Not included as positive proteinuria.)

Forty per cent showed some evidence of renal pathology. In Lyall's study,[3] subjects were entering service from civilian life. In this report, the men are being released from service. His group of "albuminuria without nephritis" may in part correspond to this presentation of transient proteinuria.

MacLean [11] found proteinuria in 4 per cent of healthy British soldiers, after exercise. Diehl and McKinley [12] found proteinuria in 5¼ per cent of all healthy freshmen at the University of Minnesota.

TRANSITORY PROTEINURIA

IN A previous study,[13] it was found that after dizziness or fainting* some 10 to 30 per cent of the subjects might show proteinuria after one or two hours had elapsed. These same subjects did not exhibit proteinuria before the fainting or vertiginous episode.

In my own series (this report) 83 per cent of the proteinurias were of the "transitory" type. This is a fraction under 1 per cent of all the men examined. In this group, I believe that the causative mechanism is a reflex vasoconstriction of renal vessels with a decrease in renal flow. This concept is, of course, not an original one. It has been advanced before.

Many soldiers who were dizzy and some who had definite syncope failed to show any proteinuria. It seems possible that some individuals are more susceptible to proteinuria on this basis than others.

This series was worked out in the summer months so that cold air on feet or body (possibly analogous to cold-pressor tests) was virtually non-existent.

*Factors which precipitated the fainting or vertigo in this series included: cold-pressor tests, exercises, standing on a tilted platform or venipuncture.

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Calcium oxalate crystals were found in 2 cases (1.2 per cent of transitory proteinuria and 1 per cent of total proteinuria cases). This is mentioned since an oxaluria may cause a proteinuria. However, since the urine *did* clear, this should have had no bearing on these cases.

The question asked about dizziness or fainting was asked in front of other men on the line. The possibility of "shame" (group age mostly early 20's) may have led to some spurious "no" answers.

The speeding up of the actual venipuncture procedure by means of the new Beck-Dickinson Vacutainer tube greatly reduced the number of men who fainted or became dizzy. When this faster procedure was done on 300 subjects, not a single instance of syncope or dizziness occurred. The incidence of proteinuria did not seem to alter substantially since on this small a series the difference (chi square method) would not be significant.

Another possibility of decreasing the proteinuria, dizziness, and syncope and the resultant possibility of accidents due to syncope, is to change the physical examination traffic sequence so that the urinalysis is done *prior* to the venipuncture.

Eggs, alcohol, and other foods have been indicated as possible causes of proteinuria.[2] This possibility was not adequately explored in this series.

Back in 1924, McNabb and Field[2] found proteinuria in 45 per cent of the personnel in a citizens' training camp. About half were of the "orthostatic" and the other half of the "persistent albuminuria" type. However, in those days urine analyses were not done routinely prior to entry into service, so the statistical contamination by pre-existing albuminuria makes this of doubtful significance.

ORTHOSTATIC PROTEINURIA

IN THE 203 cases of proteinuria, 12.3 per cent were diagnosed as orthostatic proteinuria. In only two cases was a previous history of orthostatic proteinuria obtained. That previous record was not accessible in either case. A history of dizziness was found in only one case of the orthostatic group.

The method previously described was felt to be adequate to detect renal tract abnormalities. The men were told that this test was important to their health. This was to avoid the possibility of "borrowed" specimens. However, a check on this could not be performed on orthostatic specimens. The need for a convenient, fast, and simple method was seen in this procedure. This appeared to be satisfactory and easily adaptable to office practice.

Most authorities agree that orthostatic proteinuria is a benign condition[10] found mostly in children and young adults. It usually disappears in later life.

Orthostatic or postural proteinuria is probably due to some disturbance in the renal circulation leading to congestion (venous stasis) induced by the upright position with or without lordosis. Injection of epinephrine, constricting the renal vessels[6] or clamping the renal artery[5] for 10 to 30 seconds can produce a proteinuria. These phenomena are due to the temporary "asphyxia" of the kidney, affecting the permeability of the capsule. The same effects are seen in the congested kidney (stasis kidney) of heart disease.[5] Thus it may be impossible to demonstrate any anatomic cause for protein in the urine. The hidden cause could be an invisible change in the all-important capsular epithelium covering the glomerulus. Although the protein originates in the capsular space (as may be shown by coagulating it by heat) it may be augmented by accretions from the tubules such as detritus of degenerated tubular cells in nephritis.[5]

Erlanger and Hooker[14] noted that pulse pressure was lower than normal in subjects of orthostatic proteinuria and that the degree of protein increases in proportion to the reduction in pulse pressure. The erect position lowers the pulse pressure. Gesell[15] was in agreement with this.

Schreiber[12] speaks of the "psychophysical" aspect of orthostatic proteinuria.

14. Erlanger, J. and Hooker, D. R.: Johns Hopkins Hosp. Reports, 12:145 (1904)
15. Gesell, Robert A.: American Journal of Physiology 32:70 (1913)

PROSTATITIS AND PROTEINURIA

Of 203 subjects with proteinuria, only four had prostatitis. This is a ratio of about 2 per cent; or a ratio of 2.4 per cent of all those with transitory proteinuria. Only one had prostatitis with orthostatic proteinuria, which amounted to 2.4 per cent of all the cases of orthostatic proteinuria. Seven cases were "undiagnosed" because their terms of service expired before laboratory studies could be completed. One of these seven had a prostatitis. And certainly prostatis may cause proteinuria.

Seven of the 203 cases of proteinuria could not be properly evaluated since they had reached the end of the term of their service. These men were advised to report to the Veterans Administration or to family physicians for further investigation.

Two patients were found to have definite diseases. One of these seemed to be a definite case of chronic nephritis and one was a suspected renal tumor.

SUMMARY

1. At "routine" examination of more than 20,000 presumably healthy men, some 203 were found to have proteinuria. This is an incidence of about 1 per cent. Of these 203 subjects, the proteinuria was transitory in 169. Orthostatic proteinuria was found in 25 of the 203 cases. Only 2 of the 203 (about 1 per cent of the proteinuria group) had any significant "disease" but seven others were not studied long enough for us to be certain of a diagnosis.

2. A fairly quick method of screening out various types of proteinuria is presented. It is pointed out that this could be adapted to private office practice.

3. The need for recognizing that proteinuria does not necessarily mean disease is of prime importance to insurance examiners and to doctors doing pre-employment and employment examinations.

4. The necessity of doing more than one test when proteinuria is found is emphasized.

5. To lower the incidence of proteinuria *not* due to definite disease entities, the urinalysis should be done *prior* to venipuncture or using the Beck-Dickinson Vacutainer tube, though more investigation is needed on the suction tube.

ACKNOWLEDGMENT

My deep appreciation to Dr. S. Edward King (Col. M.C. USAR), consultant, Internal Medicine, First Army Headquarters, under whose guidance and direction original studies were done, and also to Major Daniel Howe, who was kind enough to offer me all the assistance needed to carry out this study at U.S.A.H. Processing Center, Camp Kilmer, New Jersey.

12 Carlton Street

Poliomyelitis and Hospitalization

Notwithstanding millions of dollars spent in research the poliomyelitis problem becomes more complex year after year. It seems almost certain that the disease is spread in some other manner as well as by human carriers. The discovery of the Coxsackie virus and the finding of three types of poliomyelitis virus have added confusion to the diagnosis. Moreover Rosenow is convinced the etiologic factor is a specific streptococcus while Scobey believes that a toxin can explain the symptoms and pathologic findings.*

There is no specific remedy for the disease nor reliable prophylactic measures for its prevention. Isolation and quarantine have been failures for the control of epidemics. Let us hope that gamma globulin will prove to be of more value for prevention than seems likely at the present moment. Thus far poliomyelitis is still unsolved and remains uncontrollable. Therefore it is necessary to concentrate on the best of treatment which can be provided only in a hospital.

*Hoyne, A. L.: Illinois M. J. 106:123 (August 1954).

Robert Richmond, M.D.
H. Preston Price, M.D.
Jersey City

Papillary Fibroma of the Pulmonic Valve

Report of a Case*

Only five times in world history has a papillary fibroma of the pulmonary valve been reported. To this meager collection, Dr. Richmond and Dr. Price add a sixth case.

We recently encountered the first cardiac valve tumor found in the Jersey City Medical Center, where there are records of 6,000 postmortem examinations. As in all the other [1] described valvular papillary fibromas, this one was an incidental finding and had not been associated with any specific clinical symptoms or signs. Yater [2] in 1931, reviewed the literature and collected 25 fibromas of the heart valves. Five of these were on the pulmonic valve. In 1951, Prichard,[3] in his excellent review, stated that only 28 fibromas of the heart valves had been reported to date, and that the number of pulmonic lesions remained at five. Other reviews [4] have also indicated a very low incidence of tumors of the cardiac valves.

A 73-year old elevator operator was admitted for the first time on April 14, 1953 complaining of shortness of breath and weakness of several days' duration. For years, he had suffered from a productive morning cough and shortness of breath on exertion. He slept with one pillow, and had never been bothered with nocturnal dyspnea or edema.

Positive physical findings on admission were limited to the lungs and heart. The chest was emphysematous. Basal dullness and moist rales were noted bilaterally. The point of maximal cardiac impulse was in the fifth intercostal space in the midclavicular line. There was a soft, Grade I, systolic murmur at the left of the sternum in the second intercostal space. Heart rhythm was regular, temperature 99, pulse 86, respiration 33 and blood pressure 130/60.

Urinalysis showed a specific gravity of 1.015 with 2 plus albumin, negative sugar, a few red blood cells and occasional white blood cell per high power field. Hematocrit was 49. White blood cell total was 9,200. Non-protein nitrogen was 58; and the blood sugar 173. The patient remained dyspneic with a temperature ranging between 99 and 101 until his death early on the second day of hospitalization.

Postmortem diagnoses were: severe bilateral bronchopneumonia, papillary fibroma of the pulmonic valve and chronic duodenal ulcer. The heart weighed 550 grams. The circumference of the valvular orifices in centimeters were: tricuspid 12; pulmonary 8; mitral 9; aortic 9. The left ventricle measured 18 millimeters and the right ventricle was 5 millimeters in thickness. On the left cusp of the pulmonary valve, a soft, pedunculated, round, smooth papillary mass measuring 6 millimeters in diameter was noted. It lay on the central portion of the medial surface of the cusp (Fig. 1). In microscopic sections of the pulmonic valve, there was a papillary tumor which had a narrow fibrous pedicle. It was composed of delicate villi possessing central loose fibrous tissue or central hyalinized tissue, and a covering of a single layer of cuboidal clear endothelial cells (Fig. 2). The valve

*From the Department of Pathology, Jersey City Medical Center.

1. Hertzog, Ambrose: Archives of Pathology, 22:222 (April 1936)

2. Yater, Wallace: Archives of Internal Medicine, 48:627 (September 1931)

3. Prichard, Robert: Archives of Pathology, 51:98 (February 1951)

4. Leach, William B.: Archives of Pathology, 44:198 (March 1947)

leaflets and the valve ring were histologically normal.

The right lung weighed 950 Grams and the left lung 1150 Grams. They were smooth, dark pink and spongy. The cut surface of the lower lobes were dark red with small, firm granular areas. Dark red frothy fluid could be expressed. The lower lobe contained yellowish purulent material. The pulmonary vessels were patent. In sections of each lung, the bronchi were solidly filled with polymorphonuclear cells, and there was a loose polymorphonuclear infiltration of the muscular walls. Adjacent lobular areas of alveoli contained polyps and fibrin. The second portion of the duodenum presented a 1.5 by 1.0 centimeter ulcer which had a red granular base and sharp overhanging mucosal margins. Microscopically, the lesion was a typical benign peptic ulcer.

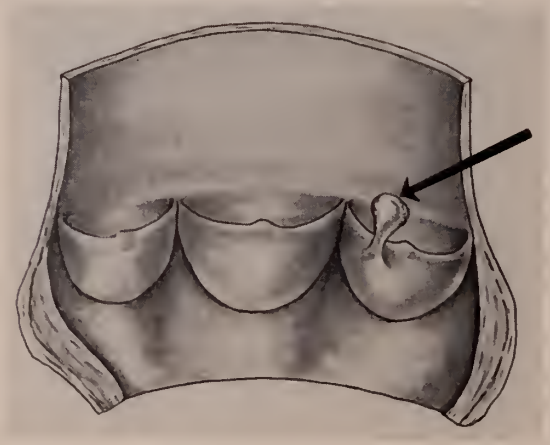

Figure 1. Papillary fibroma of the pulmonic valve. Sketch of gross appearance.

Figure 2. Microscopic appearance of the delicate fibrous papillae.

This is the sixth papillary fibroma of the pulmonary valve chronicled to date. As in the other reported cases, the valvular tumor was an incidental finding, and did not contribute to his symptomatology or death.

The Medical Center

Fundamental to Youth

We are not born knowing how to get along with other people! Learning this and good citizenship, developing hobbies and skills for life-long satisfaction and enjoyment, learning how to enjoy and benefit from the out-of-doors . . . these things are fundamental to youth.

All year-around in most American communities, Red Feather youth service programs are guiding boys and girls into activities that develop habits and attitudes of good character and personality. Under the direction of qualified social group workers and helped by a host of volunteer leaders, boys and girls all over the country are growing up into useful and happy citizens. They learn to live together in the world of summer camp, they take part in winter group discussions, and work together in youth councils and clubs all year around.

Morris H. Saffron, M.D.

Passaic

Effective Control of Pruritis With a New Antihistaminic-Calcium Combination

The role of calcium in pruritic skin lesion has been a controversial one for many decades. Dr. Saffron here points out one form of calcium medication which was found very effective when combined with an antihistaminic.

Opinions about the value of calcium in skin diseases have varied since it was first suggested by Wright, with appraisals ranging from enthusiasm [1] to outright criticism.[2]

When readily soluble preparations containing adequate concentration were made available for intravenous administration, calcium again became popular in the treatment of exudative dermatoses. Recently calcium in therapy has been characterized as of only slight value when given orally; but intravenously it has "a very definite effect in limiting edema, pain and exudates in acute dermatoses . . . This remedy will often prove successful in acute urticaria and . . . it deserves further recognition. It must be given slowly to avoid undue heating effect and it is lethal to the tissues if injected outside the vein."[3]

The development of the antihistamines added another group of drugs useful in urticaria and pruritic eruptions. A number of increasingly effective histamine antagonists have appeared in rapid succession. Side-effects have been reduced to a minimum. The exact *modus operandi* of the antipruritic effect of the antihistamines is still poorly understood. The distribution of these drugs in the tissues and their subsequent metabolism has been difficult to determine.[4] A recent addition to the list of antihistamines is 1-methyl-4-amino-N'-phenyl-N'-(2'-thenyl)-piperidine tartrate (Sandostene®).† It is characterized by great potency, low toxicity, distinct anticholinergic action, local anesthetic properties; and in addition, possesses a strong antipermeability factor. Since combining Sandostene® and calcium reduces the toxicity for each component,[5] it was decided to evaluate a combination of the two, for intravenous use.†

This has already been the subject of papers by European clinicians. Huber [6] studied the effect of the preparation on the blood-aqueous

†Made available through the Research Department for Sandoz Pharmaceuticals. Each ampul contains 50 mg. of active ingredient dissolved in 10. cc. of calcium gluconogalactogluconate 10 per cent. Each tablet contains 25 mg. of active ingredient.

1. White, C. J.: Calcium Lactate in the Dermatoses, Journal of Cutaneous Diseases, 32:691 (1914)

2. Pusey, W. A.: *Principles and Practices of Dermatology*, New York, D. Appleton & Co., 1924, p. 120.

3. Bolam, R. M.: *Modern Practice in Dermatology*, Ed. by G. B. Mitchell-Heggs, New York, Paul B. Hoeber, 1950, p. 35.

4. Feinberg, S. M., Malkiel, S. and Feinberg, A. R.: *The Antihistamines*, Chicago, The Year Book Publisher, Inc., 1950, p. 48.

5. Rothlin, E. and Cerletti, A.: Die Pharmakologie Des ASC 16. International Archives of Allergy 4:191 (1953)

6. Huber, A.: Allergische Erkrankungen und die Permeabilitat der Blutkammerwasserschranke, Int. Arch. Allergy 4:200 (1953)

humor barrier of the eye. He was impressed by the reduction in permeability of the vessels as determined by the fluorescein test, thus corroborating similar pharmacologic findings. Bigliardi[7] treated 131 dermatoses, including acute and chronic urticaria, Quincke's edema, idiopathic pruritus, pruritus due to metabolic disorders, neurodermatitis, chronic eczemas and drug eruptions. He reported satisfactory results in acute urticarias of all types, including those produced by drugs. Angioneurotic edema and idiopathic pruritus also responded well. Results were less impressive in pruritus of organic origin and in chronic eczemas with urticaria. Chronic urticaria, neurodermatitis, prurigo, and eczemas attributed to drug ingestion did not respond satisfactorily. Bigliardi[7] did not observe any untoward side-effects, and suggested that the "heating effect" during the injection was less intense with Sandostene®-Calcium† than with 10 per cent calcium gluconate alone. Since sedation persists for several hours after treatment the author recommends warning the patient about driving and using dangerous machinery. Relief from pruritus may continue for eight hours. Essellier[8] and his associates reported good or fair results in all 13 cases of generalized pruritus, good results in all 9 cases of urticaria, good results in 18 of 24 cases of drug exanthemata, good or fair results in 6 of 12 cases of erythema nodosum, fair results in all 3 cases of insect bites and good results in one case of Schonlein-Henoch syndrome. In some cases, Essellier[8] gave injections of 10 to 20 cubic centimeters of the preparation intravenously 2 or 3 times daily. Although side-effects were observed in 50 per cent of cases, they were always slight and of short duration, including 3 cases of nausea and 12 of vertigo.

THE present study is based on observations made in 55 patients in private practice. All complained of severe pruritus. They were otherwise unselected. All patients were ambulatory throughout except for two cases of generalized exfoliative dermatitis. In this project, each patient received at least one daily intravenous injection of 10 cubic centimeters of Sandostene®-Calcium† plus 3 tablets of Sandostene® orally. Length of treatment varied from 3 days to 12, with an average of four days. The entire amount was injected within a period of three minutes with the patient reclining. A transient "heating effect" of variable intensity was noted and mentioned by 50 per cent of the patients. When present at all, this effect was more marked with the first few injections, becoming less annoying on subsequent days. In no instance did the discomfort prevent the patient from returning for further treatment.

Our results in general were very satisfactory and are summarized in the table:

Diagnosis	Patients	Treatment Days*	Complete Relief	Partial Relief	No Relief
Acute urticaria	9	4	9	0	0
Chronic urticaria	3	6	0	1	2
Angioneurotic edema	1	3	1	0	0
Drug eruptions (Penicillin)	7	4	7	0	0
Drug eruptions (Other)	6	4	4	2	0
Neurodermatitis	6	6	0	2	4
Contact dermatitis	8	4	6	2	0
Erythema multiforme	2	3	2	0	0
Idiopathic pruritus	6	3	1	1	4
Dermatitis herpetiformis	2	4	0	0	2
Generalized exfoliative dermatitis	2	8 to 12	2	0	0
Pityriasis rosea	3	3	2	1	0
	55		34	9	12
			62%	16%	22%

*"Treatment days" equals the number of injections, as only one injection was given daily except in three cases later discussed.

Relief from itching lasted, on the average, 8 hours. By administering the injection late in the afternoon, the patient was almost always assured of a sound night's sleep, free of annoying itching. One of the remarkable features of this combination is the relative absence of side-effects. One patient complained of slight momentary nausea, and 2 older patients noted vertigo. In these two, the dizziness may be re-

7. Bigliardi, P.: Ein neues Antiallergisches Praparat. Int. Archives of Allergy 4:211 (1953)

8. Essellier, A. F., Forster, G. and Morandi, L.: Die Behandlung Allergischer Affektionen Praxis. 42:751 (1953)

lated to postural change following the injection.

COMMENT

SINCE no controls were used in this study, the effect obtained could not be compared directly with other forms of antipruritic therapy. However, from the results, it is apparent that the exudative type of eruption responded very well, particularly the acute urticarias and penicillin reactions. The angioneurotic edema, characterized by enormous swelling of the lips, one eyelid and the penis, responded dramatically to two injections at eight-hour intervals. The following day there remained only a slight localized swelling. Single injections were continued for two additional days. The results were also good in 6 of the 8 cases of contact dermatitis; five of these were caused by a petroleum solvent, three by contact with plant irritants. One case of extensive poison ivy in an annual sufferer cleared rapidly after three daily injections, much to the patient's surprise and pleasure.

Both cases of dermatitis herpetiformis were seen in a state of exacerbation; relief from itching was temporary with Sandostene®-Calcium† therapy, and in both instances relief was followed by a marked increase in the symptoms. Both patients subsequently were relieved by sulfapyridine.

In only two of the six cases of neurodermatitis, was there partial relief from symptoms. Since emotional factors play an important role in the perpetuation of the pruritus, antihistaminics can, at best, serve only as an adjunct to other treatment. Results were unimpressive in the three cases of chronic urticaria.

One case of generalized exfoliative dermatitis was in a male, aged 44, who had been hospitalized for one month and given cortisone and ACTH with no alleviation of intolerable itching. When first seen at home the entire skin *de capite ad calcem* was red and edematous. He had not slept in weeks. Following the first injection he noticed a distinct lessening of the pruritus and was able to get some rest. He received two injections per day for the first 4 days and, in addition, 3 tablets of Sandostene®. After four days, a daily injection of the Sandostene®-Calcium† combination was continued for an additional eight days along with oral therapy. Colloid oatmeal baths were also used. Improvement was gradual with no relapses. He was able to return to work within six weeks. The other patient, a woman of 54, developed an intense reaction following the application of a hair-dye. The dermatitis was particularly severe on the upper half of the body. After two daily injections for three days, the process seemed to become much less acute, and within a week the skin began to regain normal appearance. This woman had also received previously large doses of cortisone without benefit.

CONCLUSIONS

OF 55 patients with various dermatologic conditions, in whom pruritus was the most prominent symptom, thirty-four (62 per cent) received complete relief and nine (16 per cent) partial relief with a new antihistaminic-calcium combination. Twelve cases (22 per cent) were unimproved. This latter group included the neurodermatoses and cases of endogenous pruritus of undetermined origin. The treatment is simple and free from severe side-effects. An average of 4 to 5 injections was given to each patient. If improvement is not noted within 3 or 4 days, a satisfactory result will probably not be forthcoming. In the treatment of the exudative dermatoses the results were eminently satisfactory. In properly selected cases this synergistic combination of calcium and histamine antagonist† will give better results than when these drugs are used separately. Sandostene®-Calcium† should prove a welcome addition to the dermatologist's formulary.

292 Paulison Avenue

William J. Snape, M.D.
Camden

Duodenal Ulcer and Renal Calculi In Identical Twins

Only five times in the world literature has duodenal ulcer been reported in identical twins. Dr. Snape now contributes the sixth such case. Each of these twins also had renal calculi, which, in this respect, makes Dr. Snape's contribution unique.

The relative importance of various factors in the etiology of peptic ulcer has so far, defied definition. Despite several careful investigations,[1,2] the inheritance of either a specific organ inferiority or the familial susceptibility to peptic ulcer is not proved.[3] Only by accumulation of sufficient data in the literature, may we properly evaluate the importance of genetics in the ulcer diathesis. The development of the same disease in identical twins when studied in sufficiently large numbers has been useful in establishing the genetic patterns of other diseases.[4] There are very few such studies of peptic ulcer bearing twins. According to Ivy and Flood,[5] up to 1950 only 5 pairs of identical twins with peptic ulcer had been reported in the literature. Another case reputedly of identical twins with ulcer[6] was not included in this collected group since the basis for establishing uni-ovulatory origin was meager. This report is written therefore not only for its novelty but also with the thought that it may be of use to the professional geneticist interested in disease processes, and to those interested in the theoretical aspects of the pathogenesis of peptic ulceration.

These were the first born of working class parents. They were born in 1908. Nothing is known relative to the delivery. The father died four months later. Neither twin remembers anything unusual in their lives until when after 8 years of widowhood their mother remarried. This second marriage lasted three years, when it was terminated by the mother's suicide. The twins, now totally orphaned, at the age of 11 were separated and reared independently. Both children were happy in their new environments. A attended elementary school through the seventh grade. B completed 8 grades. They were apprenticed in different trades in separate shops. A was married at the age of 19 and B was married 4 years later. Both are apparently well adjusted to their marriages. None of their offspring have gastro-intestinal complaints as yet. A half-brother, however, allegedly has radiographic evidence of duodenal ulcer.

A considered himself healthy until, at the age of twenty-two, he developed chronic epigastric pain typical of ulcer. In 1932 he passed a kidney stone. In 1945, another stone was removed from the right kidney pelvis. By 1946 his ulcer symptoms had become so severe that he had subtotal gastric resection. At this time a duodenal and a gastric ulcer were removed. He has been free of both renal and gastro-intestinal symptoms since 1946.

B first noted epigastric cyclic distress in 1944. From 1944 to 1950 he was treated with a Sippy-like regimen. However x-rays in 1950 still revealed an active duodenal ulcer. (See Figure 1). Since 1950 he has received no alkalie, but has continued to drink large quantities of milk. In 1954 he too

1. Riecker, H. H.: Ann. Int. Med. 7:732 (1933)

2. Riecker, H. H.: Ann. Int. Med. 24:878 (1946)

3. Grossman, M. I. and Ivy, A. C.: Gastroenterology 16:793 (1950)

4. Gates, R. G.: Human Genetics. Macmillan Co. New York (1946)

5. Ivy, A. C. and Flood, F. T.: Gastroenterology 14:375 (1950)

6. Frieman, A. G. P.: Brit. Med. Jour. 1:765 (1947)

accumulated a right renal oxalate calculus, which he eventually passed. Shortly thereafter he developed a coronary thrombosis from which he has recovered without incident.

Physical examination on June 1954 revealed the following simularities and differences:

	A	B
Height	154 cms.	156.5 cms.
Weight	52.5 Kg.	52.5 Kg.
Eye coloring	Blue	Blue
Cornea	Arcus senilis	Arcus senilis
Darwin tubercle	Right ear	Left ear
Handedness	Right	Left
Crown Hair whorls	Clockwise	Counter clockwise

Blood samples were submitted to the Blood Grouping Laboratory (Louis K. Diamond, Director) with the following result.

	Anti	A	B	C	D	E	c	M	N	K	S
Twin A		O	O	+	+	O	O	+	O	O	+
Twin B		O	O	+	+	O	O	+	O	O	+

These results along with the other similarities would indicate there is a very good possibility that these twins are uni-ovular.

Both those who support the genetic susceptibility to ulcer theory and those who believe that environmental stresses are the *sine qua non* of ulcer pathogenesis can find support in the case-histories. From the ages of 3 to 8 the children evidently suffered barbarous treatment. Could this have been sufficient stress to

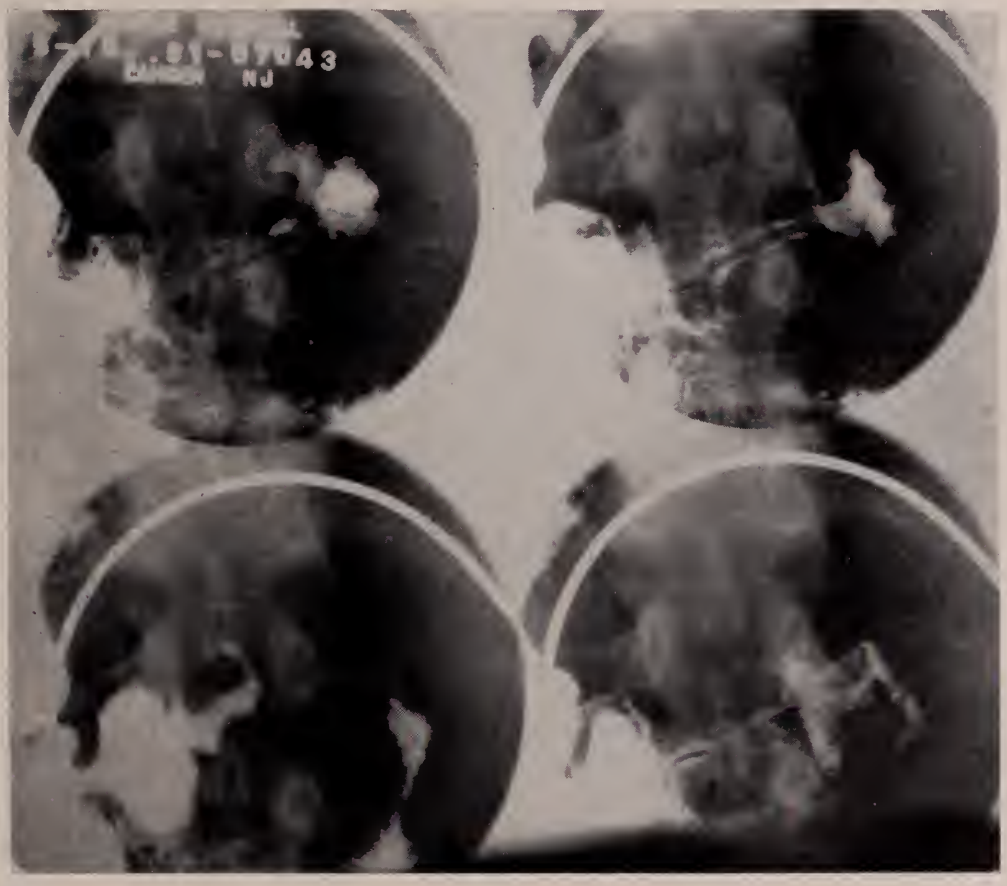

Figure 1. Roentgenogram demonstrating duodenal deformity of ulcer in patient B.

have laid down certain emotional patterns which culminated in duodenal ulceration later in life? Yet a half brother, resulting from the second marriage of the mother, reputedly also has intractable ulcer. This child was separated from his unfortunate environment at the age of eighteen months. This may seem a rather early age for emotional stresses to evoke an ulcer some 20 years later.

A review of the literature serves only to emphasize the necessity of registering these cases of peptic-ulcer bearing twins, whether reported or not. It is suggested that the family physician with his close personal contacts may be in a more favorable position to locate such cases, than those practicing in large urban medical centers. Dr. A. C. Ivy of the University of Illinois has offered to collect such data if sent to him.[5]

SUMMARY

A BRIEF case history of a pair of identical twins with duodenal ulcer is reported. One was proved at operation, the other by roentgenogram. This represents the sixth such instance reported. These twins are unusual inasmuch as they had separate environments after the age of eleven. One first experienced gastro-intestinal symptoms at the age of 22 and the other at the age of 26. Both twins incidentally developed renal calculi.

573 Stevens Street

High Survival Rate in Early Prostatectomy

Complete removal of the gland in men with early cancer of the prostate gives them survival chances almost as high as that for all other men of the same age, a Johns Hopkins Hospital survey showed in the November 13 (1954) Journal of the American Medical Association.

A study of patients treated by this operation in the last 50 years revealed that 49 per cent of the patients whose cancer was detected in the early stage lived 10 years or longer, compared with 53 per cent of other men of the same age in the general population. So far, no better treatment has been found for cancer of the prostate. Annual examinations for men over 50 years old should result in finding a large per centage of such cancers while they are still in operable stages.

H. J. Jewett, reporting on this project said cancer of the prostate is the most common type of cancer among men and is responsible for 12 per cent of all deaths from malignant disease annually in the United States. Its incidence in men over 50 years of age is probably no less than 14 per cent.

Between 1904 and 1954 complete removal operations have been performed on 357 patients at Johns Hopkins, 320 of whom have been studied, he said. In 1949 a study showed that of 127 patients operated on, 48 per cent lived five years after operation. A 1953 study showed 25 per cent lived 10 years or more. Patients whose cancers had been found in the early stages had better chances than those whose disease had spread before the operations were performed. During the last ten years, 200 operations were done, with only a three per cent mortality. In the hospital's private service, there have been no deaths in 11 years, while the last 100 patients operated on since 1949 all survived. Average age at operation was 60 years.

Dr. Jewett said manual examination of the prostate gland is still the best method of screening patients over 50 and should result "in detection of a high percentage of patients suitable for the radical operation." He said in the Army, routine prostate gland examination of men over 40 years has led to an operability rate of 55 per cent.

Charles Block, M.D.
Newark

The Evaluation of a New Sedative-Hypnotic

The search for a safe and effective sedative and hypnotic continues. The problem is always to sedate cortical activity without undue side effects. Dr. Block believes that a new barbiturate, a scopolamine-ergotamine combination, is the answer.

The most widely used drugs today, aside from simple analgesics, are barbiturates and their derivatives. The increase in their usage parallels the heightened stress and tensions of daily living, reflected in the rising number of anxiety states seen by the physician in his daily practice. Under the vague terms, "nerves" or "nervousness," are grouped varying forms of emotional maladjustment arising from many causes: environmental difficulties involving home and family, maladjustments in employment or social status, financial and business difficulties and so on. The manifestations of these difficulties are numerous, running the gamut of symptoms from simple irritability, insomnia, weeping, and headaches, to more serious psychosomatic reactions involving, as an example, a wide range of gastro-intestinal disturbances.

The physician's problem is how to sedate the patient's cortical activity so that exaggerated response to stress is eliminated without disturbing normal activities. It has been the practice to administer phenobarbital or its derivatives to patients with anxiety states or mild psychoneuroses, to permit better emotional adjustment or to eliminate insomnia. The use of barbiturates, however, is not without its drawbacks. Frequently therapeutic doses produce drowsiness or after-effects. For avoiding these, a new combination of three barbiturates together with an ergot derivative and scopolamine was used. This combination is tradenamed as Plexonal.* It has the advantage of mutual potentiation of the three barbiturates using sub-threshold doses plus potentiation by scopolamine and dihydroergotamine. In states of sympathetic over-activity there are usually increased metabolic rates, slightly elevated body temperatures, and (occasionally) slightly elevated blood sugars, with moderate blood pressure elevation. With vagal dominance, the opposite is true. In the tension states there is usually a predominance of sympathetic activity resulting in excess energy expenditure. Dihydroergotamine, a sympathicolytic agent, aids conversion from a state of increased energy expenditure to one of relative inactivity and conservation of energy. In addition, the dihydroergotamine[1] has a potentiating sedative effect with barbiturates and scopolamine.[2]

*Plexonal has the following composition:

Sodium diethylbarbiturate	45 mg.
Sodium phenylethylbarbiturate	15 mg.
Sodium isobutylallylbarbiturate (Sandoptal)	25 mg.
Scopolamine hydrobromide	0.08 mg.
Dihydroergotamine methanesulfonate	0.16 mg.

It was supplied by Sandoz Pharmaceuticals, Hanover, New Jersey, the manufacturers.

1. Baer, H.: Schweizer Medizinsche Wochenschrift. 81:495 (1951)
2. Rothlin, E. and Bircher, R.: Progress in Allergy, 3:43 (1952)

MATERIAL AND METHOD

Seventy-six patients were selected for this study. All had previously received sedative medication such as phenobarbital, bromides, sodium pentobarbital and mephenesin, without satisfactory results. Nine patients from this group had previously received a belladonna-ergotamin-phenobarbital combination.† The dosage of Plexonal* was standardized to simplify the evaluation. Each patient received one tablet after meals, and one or two at bedtime; a total of four to five per day.

RESULTS

Of twenty-three patients exhibiting gastro-intestinal symptoms as an expression of their tension, (pyloroduodenal spasm, duodenal ulcer, irritable colon, and so forth) eight obtained excellent results with Plexonal,* which eliminated further need for antacids and antispasmodics; twelve were benefited sufficiently so that the dosage of antacids and antispasmodics were markedly reduced although complete elimination of these drugs was not feasible. The remaining three in this group were not benefited by this therapy. Nine of the patients in this category had previously been given a belladonna-phenobarbital-ergotamin combination.† Six of the nine obtained greater relief from the symptoms of heartburn, belching, and abdominal distention with Plexonal* than they did with the ergotamine combination.† The remaining three reported that the latter† gave them more relief from their symptoms.

Among twenty-two patients suffering from premenstrual tension (the chief symptoms being depression and irritability) almost complete relief was obtained in eleven. Nine reported marked improvement. Two were not benefited.

The third category consisted of twenty menopausal patients whose complaints were chiefly "nervousness," apprehension, crying spells, and depression. These patients were receiving hormone therapy without benefit or only short-term benefit. Ten patients were markedly benefited by Plexonal* to the extent that these symptoms were almost entirely eliminated, and hormonal dosage could be reduced by at least fifty per cent. Six patients reported good results with Plexonal* but concomitant medication could not be reduced without some return of symptomatology. Four patients had fair to poor results.

The remaining twelve patients are loosely classified as "tension states," usually exhibiting insomnia, nervousness, irritability, and occasional outbursts of anger or weeping. Six in this group obtained excellent results with Plexonal,* four exhibited considerable improvement and two (subsequently diagnosed as schizophrenics) were failures. Following is a typical case history.

A forty-two year old white male, employed as a television repairman, had been suffering from insomnia for three years. He had been under treatment for two years for a duodenal ulcer requiring constant dieting and medication. He had suffered for a longer period of time from paroxysmal tachycardia. Previous medication consisted of phenobarbital (½ to ¾ of a grain, three to four times daily) sodium pentobarbital, (grains 1½ at bedtime) aluminum hydroxide and magnesium trisilicate gels, belladonna, homatropine hydrobromide and the newer synthetic antispasmodics, with varying degrees of efficacy. He had at one time been digitalized to control the frequent bouts of paroxysmal tachycardia, which just prior to Plexonal* therapy, were occurring once every other day to two to three times daily. After three weeks of treatment with Plexonal,* the paroxysmal tachycardia attacks were reduced to one every ten days or so. Each attack lasted but a few minutes. Previously these bouts lasted from one-half to three hours. The condition of the gastro-intestinal tract was markedly improved. Antispasmodics were almost completely eliminated and antacids were required no more than twice a day in the form of two grams of alumina-gel per dose.

SIDE EFFECTS

Two or three days of medication produced, in ten patients out of seventy-six, excessive drowsiness, but after two weeks of medication had elapsed only five observed this effect. In the entire group there were no other side-effects nor was tolerance observed with this preparation given from a minimum of fifteen days to a maximum of two hundred and forty days.

†In the form of Bellergal® a Sandoz combination of these three drugs.

COMMENT

THESE data indicate the effectiveness of this medication* in reducing moderately severe anxiety states, eliminating or alleviating depression and nervousness, suppressing emotional hyper-reaction and relieving insomnia.

Kral and Krauser[3] found the best results with it in anxiety and tension states where there was marked sympathetic over-activity. They also reported that when sedation was effective, sleep was induced more easily. Similar conclusions were reached by Binswanger,[4] Boss,[5] Walter,[6] and Holtzer.[7] These authors report a surprising lack of side-effects such as hypnotic "hangover." Light side-effects as obstinate constipation were observed in two cases out of one hundred in Walter's[6] evaluation. Tolerance to sedative action developed in four out of twenty cases after two to three weeks of treatment (Nymgard[8]). It seems to be important to give Plexonal* for several weeks and then reduce it gradually. This ergotamine-scopolamine-barbiturate* combination seems to produce mild and safe sedation even when used for several weeks or longer.

SUMMARY

A new sedative preparation consisting of minimal doses of three barbiturates and of scopolamine hydrabromide and dihydroergotamine methanesulfonate,* was used in the treatment of a range of anxiety states. Good to excellent results were obtained in 87 per cent of all categories of the seventy-six patients treated. Dose varied from four to five tablets daily; one after meals and one or two at bed time. In addition, practically complete freedom from side-effects when used either as a sedative or a hypnotic makes the combination especially commendable. No cases of tolerance appeared during this course of study, even though the drug* had been given for as long as 240 days, and many other patients are still continuing the medication.

51 Baldwin Avenue

"Peculiar People"

"These American are the most peculiar people in the world," wrote de Tocqueville when he visited the U. S. in 1831. "You'll not believe it when I tell you how they behave. In a local community in their country, a citizen may conceive of some need which is not being met. What does he do? He goes across the street and discusses it with his neighbor. Then what happens? A committee comes into existence, and then the committee begins functioning on behalf of that need, and you won't believe this but it's true. All of this is done by the private citizens on their own initiative . . . The health of a democratic society may be measured by the quality of functions performed by private citizens."

What de Tocqueville noted 124 years ago and accurately reported is still a distinctly American trait. U. S. generosity, coupled with the native knack for organization, has made U. S. philanthropy one of the wonders of the land.

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3. Kral, V. A. and Krauser, W. G.: Canadian Medical Association Journal 30:453 (1954)

4. Binswanger, H.: Schweizer Medizinische Wochenschrift 81:707 (1951)

5. Boss, M.: Praxis 40:679 (1951)

6. Walter, G.: Medizinische Kliennien 48:1745 (1953)

7. Holtzer, P.A.F.H.: Geneeskunde Gidsenheit, 31:93 (1953)

8. Nymgard, K.: Urgeskartschrift fur Laeger, 115:643 (1953)

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Primary Adenocarcinoma of the Duodenum

For the first time in its long history, a primary adenocarcinoma of the duodenum has been found at the Martland Medical Center. This is one of the rarest lesions in all gastro-enterology.

Primary malignancy of the duodenum is a rare condition. Ewing[1] found that malignant tumors of the duodenum constitute 2 to 3 per cent of all neoplasms of the gastro-intestinal tract. Kleinerman[2] reported the incidence of primary carcinoma of the duodenum was only 0.035 per cent in a half million autopsies. Hoffman and Pack[3] found essentially the same incidence in a study of 176,000 autopsies. A statistical review of the tumor file of the Martland Medical Center revealed that *this is the only case of primary adenocarcinoma of the duodenum on record.*

A 58-year old man was admitted to the Medical Service of the Martland Medical Center complaining of epigastric pain and anorexia. One month prior to admission he had developed dull epigastric pain that remained constant, and was not affected by position or food. There had been no icterus, hematemesis or melena. A gastro-intestinal series revealed a moderate-sized ulcer crater in a scarred duodenal bulb with some gastric obstruction. The apex of the duodenal bulb and second portion of the duodenum were flattened suggesting pancreatic involvement. (Fig. 1.) He was placed on a strict ulcer regimen, but continued to have epigastric pain, nausea and vomiting. Gastric specimens were repeatedly negative for occult blood. Complete blood studies, stools for occult blood and gastric analysis were within normal limits. The Graham-Cole test revealed poor visualization of the gall

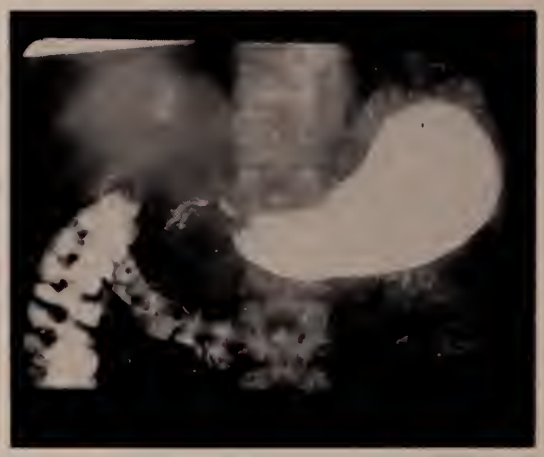

Figure 1. Note the moderate-sized ulcer crater in a scarred duodenal bulb.

*Dr. Hakim is Senior Surgical Resident; Dr. Kinney is Junior Surgical Resident and Dr. Liccese is Associate in "B" Surgery, at the Martland Medical Center in Newark.

1. Ewing, J.: Neoplastic Diseases. Philadelphia. 1940. Saunders, 4th edition.

2. Kleinerman, J., *et al.*: Annals of Internal Medicine, 32:451 (September 1950)

3. Hoffman, W. J. and Pack, C. T.: Archives of Surgery, 35:11 (January 1937)

bladder. The patient became worse and did not respond to diet or medication. A provisional diagnosis of pyloric tumor was made. An x-ray then showed a marked dilatation of the stomach with gastric retention due to obstruction in the pyloroduodenal region.

On the 20th day after admission, laporotomy revealed an irregular indurated area, about 30 millimeters in diameter in the posterior wall in the first portion of the duodenum which was fixed to the pancreas. A diagnosis of posterior perforated duodenal ulcer was made at the time of operation. No other abdominal lesion was found. Subtotal gastrectomy and anterior gastro-enterostomy were done. Pathologic report was primary papillary adenocarcinoma of the duodenum. (Fig. 2) The patient had an uneventful recovery and was referred to the Tumor Clinic.

He gained 20 pounds following surgery and had no complaints for the next 6 months. Then he had several bouts of vomiting. He was placed on a soft, bland diet, Pro-banthine® and bed rest to which he responded well. He was discharged symptomatically improved, only to be re-admitted a fortnight later. This time he was complaining of vomiting, weight loss and constant epigastric pain. He was markedly jaundiced and appeared acutely ill. Serum bilirubin was 5.48; icterus index 48. He was unable to retain fluids and was given intravenous fluid therapy and blood transfusions. His condition became progressively worse and he expired 13 days after admission.

Autopsy revealed that the first portion of the duodenum had been surgically removed with most of the stomach. A large amount of neoplastic tissue extended from the duodenal stump into the hepatoduodenal ligament causing extrinsic obstruction of the regional biliary ducts. The Ampulla of Vater was free and clear. The liver weighed 2150 Grams and both lobes were studded with numerous firm, pale yellow-brown tumor nodules measuring up to 30 millimeters in diameter. Many of the nodules had necrotic centers and were umbilicated on their surfaces. There was no gall bladder pathology. The heart was not enlarged. The coronary vascular tree was patent throughout although moderate thickness and calcification were present. Both lungs revealed moderate edema and congestion. The tumor was confined to the remaining stump of the duodenum with metastasis to the liver. Microscopically there was extensive adenocarcinomatous dissemination throughout the wall of the proximal end of the second portion of the duodenum. (Fig. 3) The tumor cells were numerous and arranged chiefly in irregular glandular fashion as well as in small clumps infiltrating all the layers of the duodenum. Metastatic adenocarcinoma was found in the liver. Sections of the pancreas revealed marked interstitial fibrosis; otherwise, nothing remarkable.

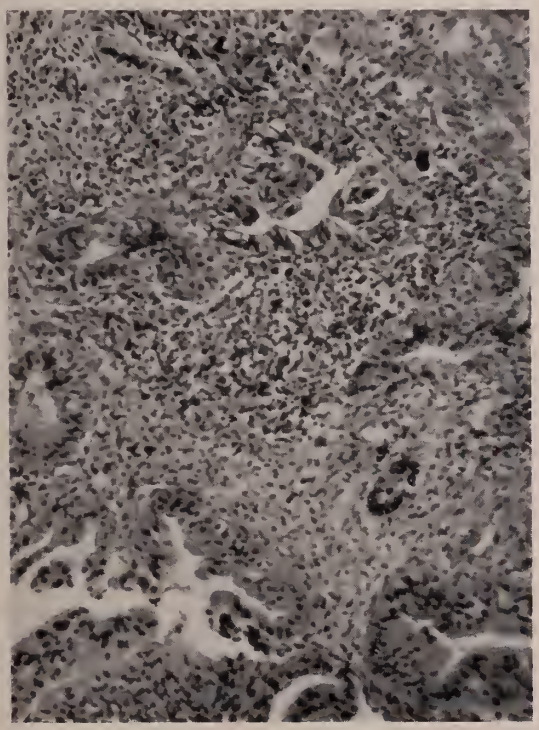

Figure 2. Photograph showing transition of duodenal epithelium into adenocarcinomatous tissue. Note tumor invasion of the underlying mucosa and submucosa.

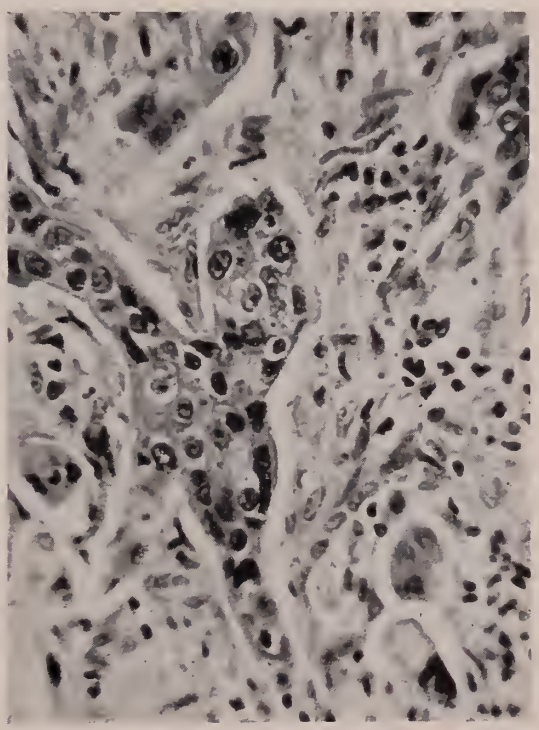

Figure 3. Photograph of single, small groups of large masses of tumor cells invading wall of the duodenum.

Primary tumors of the duodenum are extremely rare. Symptoms may include persistent epigastric pain, evidence of mild or severe gastro-intestinal hemorrhage, or biliary, duodenal or pancreatic obstruction. Final diagnosis rests with the upper gastro-intestinal radiologic findings. Irregularity of the mucosal pattern and constriction of the involved portion of the duodenum are the most characteristic findings. Shallow[4] *et al.* reported two such cases correctly diagnosed by upper gastro-intestinal series. Malignant cells have been recovered from duodenal drainage. It is recommended that portions of the fluid obtained by biliary drainage be sent for cytologic examination completely to evaluate duodenal lesions. Since primary carcinoma of the duodenum (unlike primary carcinoma of the stomach) is a relatively slow growing tumor, early recognition is essential for a favorable prognosis. It should be considered as one of the causes of the "ulcer syndrome."

The authors extend their thanks to Dr. Edwin Albano, Chief Pathologist at the Martland Medical Center for his help in preparing this paper. We are grateful to Mr. Harry L. Stevens for the histologic preparations and for the three illustrations.

4. Shallow, Thomas, *et al.*: Surgery, 27:348 (March 1950)

116 Fairmount Avenue

Salt, Simplicity and Hypertension

The lower incidence of high blood pressure in certain native tribes is not necessarily due to the primitive life being simpler than ours.

It might partly be because the habit of automatically sprinkling salt on food before tasting it is common only in western societies. Yet high salt intake is not sufficient to cause hypertension unless certain other factors also are present.

Drs. L. K. Dahl and R. A. Love reported* they studied 1,444 persons of whom 163 never salted food at the table, 645 salted food only if it tasted unsalty, and 636 salted everything without tasting it first.

Only one in the first group was found to be hypertensive, while 47 of the average group and 64 of the high-salt-intake group had high blood pressure.

They said the intake of the low-salt group was almost as low as that of the Greenland Eskimos, Australian aborigines, mountainous Chinese tribes and the Cuna Indians of Panama. *These peoples have been found to be virtually without any cases of hypertension.* This sometimes has been attributed to their "simple" lives, but some doubt that primitive life is so much simpler than our. Love and Dahl suggested that low salt intake may have more to do with their lack of hypertension.

Their study was prompted by the discovery that among 28 consecutive hypertensive patients only one denied ever adding salt to food. With the aid of the Atomic Energy Commission, they studied every member of the laboratory staff who reported for a physical examination.

They pointed out that the study does not establish a definite cause-and-effect relationship but suggests that salt is one of several factors "necessary in appropriate combination" for the development of hypertension. They said more persons among the high-intake group were overweight than among the low or average salt-eaters. This could be because overweight persons may inherit both the tendency to heaviness and a greater susceptibility to the effects of salt, or that in eating more, they simply use more salt. It also could indicate that persons already hypertensive have a greater need for salt.

They concluded that while salt intake may be an essential factor in high blood pressure, it alone is not enough to cause the disease. The report was made in the October Archives of Internal Medicine.

*October 1954 Archives of Internal Medicine.

State Activities • • •

Society for Widows and Orphans

The Society was founded seventy-four years ago, copied after an English society of a similar name founded over three hundred years ago. From a gathering of ten New Jersey doctors it has grown to a membership of 632 and is managed by a Board of Trustees who give their time and services gratis. There are no salaried persons, the only expense being for printing and postage, plus an allowance to the Treasurer for clerical assistance.

This is a "Helping Hand" Society to whose membership any physician in New Jersey, male or female, in good health may be nominated and elected. On the death of a member, other members pay a fixed assessment, this being $1.00 for those who joined before the age of fifty. The schedule of assessments for members joining over the age of fifty is as follows: between 50 and 55 years, $2.00; between 55 and 60 years, $3.00; between 60 and 65 years, $5.00.

Though we are called a "Relief" or "Helping Hand" Society, the benefits compare more favorably with regular insurance. The cash benefit cannot be bought as cheaply for like amount and age from any insurance company and the maximum benefits cannot be had anywhere for any price.

The widow receives 80 per cent of the assessment immediately, the remaining 20 per cent after expenses going into the permanent fund, now about $85,000. At the present time the widows are receiving more than $550, the amount varying with the number of members.

The number of assessments made in recent years has been as follows for the fiscal years ending May first, for 1951, 17; for 1952, 12; for 1953, 14; for 1954, 12; for 1955, 14.

The money in the permanent fund is invested in accord with New Jersey legal regulations. The income from it is used every year to help the widows in need. This does not mean all widows but only those without substance and in near distress. Last Christmas, five such widows received $100 plus quarterly payment of $100 in the ensuing year, totalling $500 each. Some of these widows have been receiving this assistance for many years.

These immediate payments, the $550 at the time of death, and the extra payments in time of need, take the place of "passing the hat" which was frequently done in the days when this society was formed and still happens from time to time. Prolonged illness and financial reverses sometimes leave physicians with little or nothing for their families. Even when there is an estate, tax authorities freeze the assets of the deceased and frequently the widows have no immediate funds available.

A common misunderstanding does exist however. The benefits of the society are solely for the widows and orphans of deceased *members*. All too often our Treasurer is approached by the widow of a *non-member* requesting assistance which cannot be given. While there is no connection between this society and the State and county medical societies, all members of the Relief Society have to be members of a county society on joining. Moreover, at The Medical Society of New Jersey 1955 Annual Meeting, the Society received official endorsement and encouragement. Should any doctor wish to join, application forms may be obtained from Dr. Herbert M. Ill of 42 Woodland Avenue, Glen Ridge, N. J.

The Trustees of the Society For the Relief of the Widows and Orphans of Medical Men of New Jersey believe thoroughly in the value and useful purpose of the society and seek to tell all of the medical men in New Jersey about its activities and the advantages of membership. After 74 years of existence too few doctors really know about it.

Hepatitis Manual Available

For the small price of 55 cents you may obtain the Public Health Service publication *Viral Hepatitis,* which deals with the aspects of the disease that concern the practitioner. It discusses diagnostic tests and treatment procedures. This 60-page pamphlet is available from the Superintendent of Documents, Government Printing Office, Washington 25, D. C

The Medical Society, the Medical Service Administration, and Medical-Surgical Plan of New Jersey

A Historical Review

JAMES E. BRYAN

PART I.

MEDICAL SERVICE ADMINISTRATION OF NEW JERSEY

In September 1938 the House of Delegates of the American Medical Association endorsed for the first time the principle of voluntary medical expense insurance, provided such plans were operated under the auspices, or with the approval of local or state medical societies. Within ten days thereafter, Dr. William J. Carrington, then President of The Medical Society of New Jersey, acting upon a suggestion by Dr. Edward W. Sprague, appointed a "Committee for the Study of Medical Cost Insurance," of which Dr. Hilton Read of Atlantic City was Chairman. After several meetings, this committee recommended that "an experiment in the voluntary indemnity insurance field should be undertaken in New Jersey . . ." Supplementary recommendations were that there be consultation immediately with consumer groups to determine what the people thought they needed in the way of medical care insurance, and that organized medicine should take the lead and assume the major administrative responsibility for meeting needs that might be revealed.

In January 1939, President Carrington acted upon the Study Committee's recommendation and appointed a "Planning Committee" under the chairmanship of Dr. Sprague. A month later this committee reported to The Medical Society of New Jersey that it had been advised by the Commissioner of Banking and Insurance that the Medical Society should not attempt to institute an insurance plan, although the Society might initiate and organize such a plan through a Board of Trustees designated by the Society. The committee noted the need of suitable enabling legislation for a medical care insurance plan, but cautioned that "before proper legislation can be initiated we must have a concrete and definite policy prepared."

The Planning Committee further stated that its purpose was "to develop a system for independent self help. The Plan is to be an effort to assist the low income group to meet their catastrophic medical expenses by means of the insurance principle . . . Such a plan should preserve the good features of private practice, particularly its individualism, its competition, its efficiency and its rewards."

Among the basic principles which the committee felt should govern any such plan were:

(1) That the plan be "on a non-profit basis with community interest;"

(2) That all fully licensed physicians in the State be eligible to participate;

(3) That free choice of physicians and free choice of patients be preserved;

(4) That the ultimate control of policy be vested in The Medical Society of New Jersey through its power of appointment to the Board of Trustees of the plan;

(5) That no membership fees be required of physicians;

(6) That the policies must apply to the individual wherever he may be taken ill;

(7) That payments should be limited to "house or hospital confining or otherwise disabling illness."

The Planning Committee asked that a "Founding Committee" be appointed by the President of the Medical Society, representing all sections of the State, and "empowered to expend money for the gathering of necessary data, and the employment of needed help and legal counsel." In March 1939, Dr. Carrington appointed a "Founding Committee" under the chairmanship of Dr. Elton W. Lance. This committee reported to the Medical Society at

its 173rd Annual Meeting in June 1939, after two months of intensive effort.

The committee recommended that the Trustees of the State Medical Society appoint at least three physicians as Trustees for the purpose of forming a non-profit corporation under an 1898 legislative Act providing for the formulation and administration of a voluntary non-profit plan; that the corporation have at its disposal a sum of not more than $5,000 to be appropriated from the treasury of the State Medical Society to finance its initial expenses; that any plan inaugurated by this corporation be considered experimental for one year only; that the corporation operate such a plan in a limited area only during the first experimental year; that the plan be on a non-profit voluntary basis and preserve the patient-physician relationship; that the details be placed in the hands of a Board of Governors appointed by the State Medical Society; and that this Board of Governors consider a set of basic principles which the committee submitted as being desirable for the government of such a plan. A legal opinion by Mr. Albert C. Wall, counsel to the Society, was cited to the effect that the only alternative to operation under the 1898 Law would be to have a new law enacted similar to Chapter 366 of the Laws of 1938, relating to hospital service plans.

In his report, Mr. Wall noted that the 1898 Statute applies to corporations not for pecuniary profit, without particular reference to any one plan; whereas the alternative—a special enabling act—"must be comprehensive. It must specify the Plan." Mr. Wall questioned whether, at that time, "the physicians in this State are ready to give adherence to any particular plan." He therefore counselled incorporation under the 1898 law, and the committee concurred.

ORIGINAL INCORPORATION

Acting upon this, the House of Delegates, in June 1939, authorized the Trustees of The Medical Society of New Jersey to appoint three members for the purpose of incorporating "The Medical Service Plan of New Jersey" and for the subsequent appointment after one year of the corporation's existence of a Board of Governors of the plan.

The plan was then envisaged as directed at the care of persons in the income groups just above the level of indigency. This is indicated by the supplementary comment of Dr. Read, Chairman of the Reference Committee which recommended the adoption of the plan. Dr. Read stated in part: "It is an effort to avoid pauperism, and an answer to provide medical care among a group that so badly needs it. It will, perforce, contain a fee schedule something like the Emergency Relief Administration and by the same token it will have to have a ceiling of eligibility." The Society also approved a statement of President Carrington that "doctors are now doing well by the indigents . . . However, the proud, independent, self-supporting middle class wants none of charity. Since they are hard hit by the unpredictable and catastrophic illness, the profession must protect them by non-profit medical care insurance."

On July 13, 1939, "The Medical Service Plan of New Jersey" was incorporated under the 1898 Statute. In the months immediately following this act of incorporation, there arose a number of questions as to whether the 1898 law sufficiently empowered and safeguarded the profession in what it proposed to do. On November 5, 1939, the Society's Board of Trustees was advised that the Department of Banking and Insurance had reached a conclusion that special enabling legislation was needed to permit the inauguration of the insurance plan then under consideration. It was then that the Society Trustees authorized the committee, under the Chairmanship of Dr. Lance, to prepare draft of an enabling act and to "take any steps necessary to insure the speedy accomplishment of the plan."

ENABLING ACT APPROVED

The Trustees of The Medical Society of New Jersey on January 28, 1940 approved the "sixth draft" of the Enabling Act, as presented by Mr. Wall, Counsel to the Society. With certain changes, the text was then "referred to the Legislative Committee for intro-

duction into the Legislature." The Trustees also approved a proposal to reincorporate the "Medical Service Plan" as "Medical Service Administration." It was stated that the Plan had been informed by legal counsel of the State Society that such reincorporation was desirable in order to "permit of a broader scope of action," and to "entitle the corporation to operate a plan or plans."

At the Annual Conference of Secretaries and Editors of Medical Societies throughout the United States, held in Chicago on November 17, 1939, Dr. Norman M. Scott, Executive Assistant of The Medical Society of New Jersey, who was then acting as Secretary to "Medical Service Plan," presented a discussion of the "New Jersey Plan" at a symposium in which the pioneering work of New Jersey, Michigan, Washington state and Pennsylvania was discussed.

The JOURNAL of The Medical Society of New Jersey, for February 1940, announced that the then current activity of the Board of Governors of The Medical Service Plan of New Jersey was "to formulate an Enabling Act governing medical service corporations, for submission to the present State Legislature. When the bill becomes a law the plan will be put into operation."

The same issue of the JOURNAL contained, for the first time, in an article on the "Medical Service Plan of New Jersey," a recognition of the two separate major aspects of the problem facing the governors of the Medical Service Plan. It drew a distinction between the work of the Plan's "Committee to Study Voluntary Health Insurance" and that of the "Committee on the Medical Care of the Indigent," pointing out that the former committee was attempting to provide the means by which *self supporting* persons might be assured of medical care for themselves and their families. The program then under consideration for this purpose was truly a comprehensive program of medical service, including home and office calls, surgery, obstetrics, x-ray and laboratory service, anesthesia, consultation and an annual physical examination.

In a special editorial appearing in the April 1940 JOURNAL of The Medical Society of New Jersey, Dr. Lance, then Chairman of the Board of Governors of the "Medical Service Plan of New Jersey," announced a proposal to re-incorporate the Plan under the name "The Medical Service Administration of New Jersey." He also reported introduction of an Enabling Act "to bring the activities of such a corporation under the supervision of the Commissioner of Banking and Insurance."

TWO APPROACHES OUTLINED

In the same JOURNAL, Dr. Scott, then "Acting Secretary to the Board of Governors," outlined two approaches to a solution of the problem of distributing adequate medical care. First, "that the medical care of the indigent is the responsibility of the community, the state and the medical profession; and second, that a plan by which persons of the low wage group may assume the responsibility of payment for their medical care on a voluntary prepayment insurance plan at a cost within their ability to pay should be instituted on an experimental basis in New Jersey." Dr. Scott pointed out that the implementation of this second purpose constituted an insurance venture — thus requiring the drafting and introduction of the Enabling Act. However, at that time it was still contemplated that the Medical Service Administration of New Jersey would be the financing and administering agency of the Medical Service Plan of New Jersey. In May 1940 the Enabling Act passed both houses of the New Jersey Legislature.

On June 3, 1940, Dr. E. Zeh Hawkes, retiring President of The Medical Society of New Jersey, reported to its Board of Trustees the completion of a plan for "health services for relief recipients" which had been prepared in consultation with the State Financial Assistance Commission, and which the Commission then proposed to send out to all municipalities in the State. This plan had been approved by Governor Moore. Dr. Lance reported that the Board of Governors of the Medical Service Administration, on May 19, 1940, had come to the conclusion "that sponsorship of this effort entails the assumption of

full financial responsibility by The Medical Society of New Jersey until such time as The Medical Service Administration is self-supporting or discontinued."

Acting upon this, the Trustees of the Medical Society authorized that the sum of $4,125 (which had been alloted to the Medical Service Plan of New Jersey in the 1940-41 budget) be made available for the expenses of the M.S.A. up to May 31, 1941, or until such time as the administration "shall be self-supporting or abandoned by agreement between the Board of Governors of the administration and the Board of Trustees of The Medical Society of New Jersey."

FARM SECURITY PROGRAM

At the same meeting, the Trustees of the Medical Society took the first steps toward providing for the administration of the Farm Security Program in New Jersey by the Medical Service Administration. The trustees further authorized the payment of legal expenses in connection with the re-incorporation of the Medical Service Administration under the new Enabling Act.

In August 1940 the Medical Service Administration announced that it then proposed to operate three plans: "(1) the Medical Service Plan of New Jersey, a complete coverage plan; (2) Medical and Surgical Service Plan for Hospitalized Patients, a 'catastrophic' illness plan to cover only the cost of illness requiring hospitalization; and (3) the Farm Security Plan, to cover the cost of medical care of about 1,000 farm families in New Jersey."

In September 1940 it was announced that more than 51 per cent of the physicians of Essex County had expressed a desire to become "Participating Physicians of The Medical Service Administration," indicating that they were ready to participate in any or all plans offered by M.S.A. The Board of Governors of Medical Service Administration then formally "requested that the Board of Trustees of The Medical Society of New Jersey give assurance to the Board of Governors of Medical Service Administration of its full moral and financial support during an experimental year in the operation of the affairs of the Administration." This request was approved. Further, the Medical Society authorized an additional advance in the amount of $6,000 to the Medical Service Administration to help defray its organizational expenses during the first year, and to provide the initial reserve of $5,000 required for the inauguration of its insurance program. The Medical Society had originally guaranteed the initial reserve of $5,000 as a loan to Medical Service Administration. However the Commissioner of Banking and Insurance advised that this reserve must be unencumbered. Accordingly, the Board of Trustees of the Medical Society, on January 5, 1941, rescinded their previous action in making a loan and authorized the $5,000 appropriation as a grant.

On February 1, 1941 the Medical Society formally announced the establishment of Medical Service Administration, and the Administration opened its offices in Trenton with Dr. Scott as Medical Director.

RESULTS OF CONSUMER STUDY

On September 14, 1941, Dr. Lance, then President of Medical Service Administration, reported to the Welfare Committee of the State Medical Society that, while labor unions and welfare organizations had been interested in the insurance plans, considerably less interest had been found among individual workers. Dr. Lance further reviewed negotiation then in progress with Hospital Service Plan of New Jersey for a joint operating agreement.

The further development of Plan 2 ("Medical and Surgical Service Plan for Hospitalized Patients") and negotiations with Hospital Service Plan for the offering of this program in conjunction with its hospitalization service program were taken over by the corporation known as Medical-Surgical Plan of New Jersey, which was incorporated in March 1942. The next month, the Board of Trustees of the Medical Society voted that the Medical Service Administration "be retained as an active organization for the purpose of continuing oper-

ation of the Farm Security, or any other medical service for governmental agencies, and for the study and development of plans to provide medical care for the indigent and low wage groups." That this continuance of Medical Service Administration for these purposes met with general approval was indicated by the action of the House of Delegates in 1942 in appropriating $14,000 to Medical Service Administration.

In June 1942, Dr. Lance entered military service and resigned as a member of both the Board of Governors of M.S.A. and the Board of Trustees of M.S.P. Dr. Royal A. Schaaf was selected to succeed Dr. Lance on both Boards.

CONTINUED ASSOCIATION OF AGENCIES

On June 10, 1942, the Trustees of the Medical Society approved a statement by Dr. Lance in part as follows, " . . . proper association of our organizations, and their presentation to industry through a Medical Director, who is a member of our Board and an executive of the Society are absolutely essential and must continue indefinitely. If this association is to be abolished it is the feeling of the members of our Boards, individually and collectively, that they no longer will be interested in continuing the operation of these projects."

At a meeting of the Executive Committee of Medical Service Administration on July 19, 1942, Dr. Sprague reported that he had been in contact with the Welfare Commissioner of Newark to arrange for an appointment for discussion of the medical care of the indigent in Newark. In 1943 the Medical Service Administration was principally occupied with policies and procedures related to the medical service for the Farm Security Plan — all insurance problems being then relegated to the Board of Trustees of Medical-Surgical Plan. In November 1944, the Medical Director informed the Board of Governors that the Board of Health of Newark wished to have the Newark Plan expanded to include payment for office care of the indigent patients. The Board authorized the Medical Director to continue to study this proposal.

In February 1946, Medical Service Administration participated in developing a plan for the care of authorized service-connected disabilities in veterans. This was operated in cooperation with the Veterans Administration. New Jersey was a pioneer in developing this plan, which was later adopted in most other states. It made it possible for veterans to obtain on a free-choice basis the service of their personal physician for service-connected disabilities. Payment to the physician was on a fee-for-service basis by the V. A. Within two months, the V. A. program was a major operation in the office of Medical Service Administration, employing full time service of some 11 persons who were processing more than 300 payments each day. The Plan enjoyed the active participation of 3,000 New Jersey physicians, representing more than 70 per cent of the membership of the State Society at the time.

In May 1946, in view of the increasing cost of the operation of the plan, and the lack of adequate income to support it, the Board of Governors of M.S.A. recommended that the necessary administrative work in connection with this program be performed at the Regional Office of the Veterans Administration; that the M.S.A. continue to supervise this and carry out the program in cooperation with the Regional Office of V. A. The Board of Governors requested that a new basis of remuneration be worked out with V. A. in order that M.S.A. might continue to be the intermediary supervising agency in this program, without either loss or profit to M.S.A. Having thus established the pattern, the principles and the policies governing the V. A. program, M.S.A. arranged in May 1946 to withdraw from the active administration of the program, but to function principally in an advisory capacity and to supervise the professional aspects of the services of the Participating Physicians. To this end, The Medical Society of New Jersey, on recommendation of M.S.A. designated Dr. Edward T. Yorke as a coordinating physician, representing the medical profession in the V. A. Regional Office, providing a personal liaison between the profession and V. A.

In November 1946, the Board of Governors took the first steps toward liquidation of the Farm Security program because of the marked reduction in the enrollment in that plan.

At the same time, the Board of Governors presented a recommendation to the Board of Trustees of The Medical Society of New Jersey that the State of New Jersey, through the Municipal Aid Administration, should recognize the category of single phase medical indigency "with the understanding that a community agency rather than the medical profession determine eligibility of a person or family for recognition and medical care under this category."

It should perhaps be noted at this point that while M.S.A. no longer played any active continuous part in the direct administration of the V. A. Home Town Medical Care Program, the renegotiation of the contract and fee schedule for this program continues to be an annual function of the Medical Director of M.S.A., acting in his capacity as Medical Director of the Distribution of Medical Care of The Medical Society of New Jersey, and the agreement is now one between the Veterans Administration and The Medical Society of New Jersey.

In March 1951 the Board of Trustees of The Medical Society of New Jersey approved a recommendation of the Welfare Committee of the Society "that the Medical Society of New Jersey cooperate with the Division of Old Age Assistance (of the Department of Institutions and Agencies) to aid in the reduction of the administrative work of the Department in providing care for the aged by developing a plan to allocate the funds necessary for the program." Development of this program was referred to Medical Service Administration by the State Medical Society, and the Board of Governors of M.S.A., on March 27, 1951, granted the authority to continue negotiations with the Department of Institutions and Agencies in order to formulate a reimbursement type plan whereby physicians would be paid directly for medical service to old age assistance clients, rather than indirectly by paying clients an added grant to cover medical expenses. In January 1952 the N. J. Department of Institutions and Agencies indicated that it would be desirable to establish a single system, supported by a single fund, to provide a comprehensive, standard medical service for all the special categories of public assistance clients, as well as those on general relief, and insofar as possible, to the medically indigent also. Their belief was that this could best be done through an agency operated and controlled by the medical profession. However, after considerable study, it was found that a single fund for payment of welfare services of all types and categories was not feasible at that time. It was reported to be "considered impractical and undesirable to attempt to create uniform fees for similar services among the various agencies of the State which make use of medical care."

The Board of Governors of Medical Service Administration now has before it for consideration a suggested amendment to its Certificate of Incorporation, approved by the Board of Trustees of The Medical Society of New Jersey. With reference to the declared purposes of the Corporation, the proposal would delete the Corporation's authority to engage in any activities that may be characterized as insurance operations and would enable the Corporation to "assist selected groups of persons to secure medical and surgical services" . . . by plans or arrangements with Governmental authorities at Federal, State or lower level, on a nonprofit voluntary basis which preserves the patient-physician relationship and allows the free choice of physician and patient . . . and . . . "to act as a media or agency for Governmental authorities . . . for transmittal of payment to such physicians for such purposes" . . . and . . . "to carry out and perform purposes approved by The Medical Society of New Jersey for purpose of making such medical and surgical service rendered by such physicians available to individuals and groups not eligible as insurable risks or who are not able to pre-pay premiums for obtaining insurance protection or service benefits against illness."

Medical Service Administration has continued during the years to act as the administrative agency for the "Newark Plan," supervising the professional aspects of the program

and transmitting the public funds made available by the City of Newark for professional services rendered in their homes for indigent and medically indigent families.

This pattern for the provision of medical care to persons who are accepted as clients of public agencies — on a free choice, fee-for-service basis, may be readily extended to other municipalities and to other categories of welfare patients.

PART II.

MEDICAL-SURGICAL PLAN OF NEW JERSEY

The purposes of the "Medical and Surgical Service Plan for Hospitalized Patients" as outlined by Medical Service Administration in August 1940 — were stated as follows:

1. "To provide for the payment of medical and surgical care during illnesses among persons of selected income groups while hospitalized and under the care of a private physician.

2. "To accomplish the above purpose by establishing a plan and arrangement by which the cost of this medical and surgical care will be met by the voluntary prepayment of subscriptions on an insurance basis.

3. "To place the administration of this plan under the direction of The Medical Service Administration of New Jersey."

In this announcement in August 1940, the first reference was made to the principle of service benefits, which has always distinguished the Medical-Surgical Plan of New Jersey.

In May 1941, Dr. Thomas K. Lewis became President of The Medical Society of New Jersey. In September of that year, reporting on the developments of the Medical Service Administration, Dr. Lewis said: "Very shortly Plan 2 (The Medical and Surgical Plan for Hospitalized Patients) will be in operation . . . It is anticipated that policies for this type of service will be sold in conjunction with policies of the Hospital Service Plan of New Jersey."

In June of 1941 the two health insurance plans (Number 1 being the comprehensive program, and Number 2 the Medical Surgical Plan for Hospitalized Patients) were introduced to industry. A total of 800 organizations, having 100 or more employees, were interviewed or communicated with by mail.

The position of Hospital Service Plan was stated to be that in order for it to attempt to market the suggested medical-surgical coverage, it was essential that a separate corporation be formed with the approval of The Medical Society of New Jersey, and that this corporation limit itself to serving only such part of the public as would pay an established Contract Rate for the protection offered; and further, that to coordinate this proposed program with that offered in the hospitalization field by the Hospital Service Plan, it was essential that the coverage be offered to any group which chose to enroll, regardless of its economic status.

Nevertheless discussions and negotiations for an operating contract with Hospital Service Plan continued to be carried on by the Governors of Medical Service Administration during the closing months of 1941, and it was not until early in 1942 that decision was reached to create the separate corporation which was to confine its activity to the administration of a medical service prepaid insurance plan.

On September 21, 1941, the Trustees of the Medical Society "approved the aims and purposes of Medical Service Administration, and are prepared to cooperate in assuring the public that the medical and surgical care contemplated to be paid for under the contracts issued by the Administration will be reasonably available." The Trustees also "approved the action of the Medical Service Administration in formulating a plan in cooperation with the Hospital Service Plan of New Jersey" and "the plan so outlined by the combined organizations." The Trustees further approved the action of Medical Service Administration "in removing the income ceiling restrictions on Plan Number 2, and paying the doctor on the basis of the accomodations requested by and provided to the patient upon entering the hospital."

Again, on January 25, 1942 the Trustees "approved the action of the Officers of the Medical Service Administration in executing

the proposed contract between the Medical Service Administration and the Hospital Service Plan."

On March 22, 1942 the Trustees of The Medical Society of New Jersey adopted a resolution approving "the incorporation of Medical Surgical Plan of New Jersey as a non-profit corporation under the provision of Chapter One, Title 45, of the Revised Statutes, to establish, maintain and operate a non-profit medical and surgical service plan in conformity with the provisions of Chapter 45—A, Title 17, of the Revised Statutes." At the same time the Trustees of the Society approved the nomination of the first Board of Trustees of the proposed Medical-Surgical Plan of New Jersey, as well as proposed By-Laws, proposed form of agreement of Medical-Surgical Plan of New Jersey with Participating Physicians, a proposed form of contract by Medical-Surgical Plan of New Jersey with subscribers; and the Trustees further directed that the unencumbered grant of $5,000, which had previously been made by the Society to Medical Service Administration of New Jersey be reappropriated to Medical-Surgical Plan of New Jersey to enable the Plan to qualify with the Banking and Insurance Department of New Jersey. In addition, the Society resolved that The Medical Society of New Jersey and its component county medical societies who agreed to this proposal would "promise and agree that physicians and surgeons who are members of said respective societies will be reasonably available to render the medical and surgical services in fulfillment of the provisions of such contracts to be issued by Medical-Surgical Plan of New Jersey."

At the same time, the Board of Trustees approved the making of a sales and administrative agreement between Medical-Surgical Plan of New Jersey and Hospital Service Plan of New Jersey "generally along the lines approved between Medical Service Administration of New Jersey and Hospital Service Plan of New Jersey."

This resolution, adopted March 22, 1942, has been referred to as the "Magna Charta" of Medical-Surgical Plan of New Jersey. Three months later, the Plan enrolled its first subscribers and on July 1, 1942 it formally commenced operations.

The growth of the Plan* since that time is indicated by the summary of operations below.

PART III.

THE MEDICAL SOCIETY OF NEW JERSEY

Perhaps at no time in recent years has the unity of purpose among The Medical Society of New Jersey, the Medical-Surgical Plan of New Jersey and Medical Service Administration of New Jersey been more strongly highlighted than in January 1950, when the Society set forth its "Proposals for a National Health and Medical Care Program," popularly known as "The New Jersey 12 Point Program."

Year Ended December 31	Earned Subscription Income	Claims Incurred Amount	Claims Incurred % of Income	Operating Cost % of Income	Persons Enrolled End of Period
1942	11,148	5,395	48.4	51.1	4,131
1943	74,498	49,562	66.5	23.9	16,015
1944	187,708	135,605	72.2	18.9	30,427
1945	326,530	208,288	63.7	17.5	49,441
1946	540,227	370,576	68.6	16.8	88,088
1947	947,945	681,922	72.0	17.1	143,700
1948	1,524,814	1,203,651	79.0	15.0	236,604
1949	2,545,518	1,979,542	77.8	13.8	353,827
1950	5,252,060	4,278,098	81.5	12.9	499,882
1951	8,031,305	6,527,374	81.3	10.9	699,906
1952	10,952,158	8,720,257	79.6	10.8	997,303
1953	14,916,204	12,715,442	85.2	9.6	1,183,336

The twelve points may be summarized as follows:

1. That voluntary non-profit (Blue Cross and Blue Shield) organizations represent "the best means of budgeting hospital and medical service for the individual and his family."

2. That the cost of such insurance coverage, when borne by the insured, should be tax deductible (as it is when paid by an employer).

3. That the "growing practice of the employer contributing toward the cost of health and welfare programs for his employees and dependents" should be encouraged.

4. That government at all levels "should promote the program of such (hospital and medical care prepayment) protection for its own employees, by assuming a part or all of the cost of enrollment" . . .

5. That "as rapidly as possible, consistent with actuarial experience and sound administration, the services eligible under such voluntary non-profit organizations should be extended to cover all non-chronic ailments on an inclusive basis."

6. That once "sufficient enrollment is attained . . . consideration be given the practicability of providing medical care protection on an inclusive basis to subscribers in voluntary, non-profit plans, regardless of the financial status of the subscriber, and with no salary limitation for over-all inclusive service."

7. That "immediate study be given the possibility of providing voluntary, non-profit protection" to the "medically indigent," through "state and local funds for the purchase of such protection." It was suggested that anyone who does not have to pay a federal income tax might be classed as "medically indigent."

8. That, medical and hospital care be provided the indigent through state-county-municipal funds, "with such Federal aid as may be found necessary or may be provided from time to time, perhaps utilizing on a cost basis the voluntary non-profit organizations for the actual provision of the required services."

9. That "study be given to providing care for needy persons suffering from chronic illness, on a cost basis at State level, again with the possibility of utilizing the facilities of voluntary non-profit organizations."

10. That legislation be adopted in each State "to permit consolidation of local health jurisdictions" into units large enough to support "complete modern basic public health protection."

11. That the possibility be explored of the U. S. Public Health Service "providing competent physicians to such (sparsely populated or poorly equipped) areas when requested by State or local agencies."

12. That "a program of government subsidy" should be provided "to assist qualified individuals in obtaining professional training and to expand professional training facilities where it is found possible to expand existing schools or to establish new ones . . . We believe that any governmental subsidy that may be provided for these purposes should be granted unconditionally to approved institutions."

Thus The Medical Society of New Jersey reiterated its desire to move toward fuller realization of an objective set forth in a resolution adopted by the House of Delegates of the Medical Society in 1938: "To develop a program to make available to every man, woman and child in New Jersey adequate personal and sympathetic medical care, preventive and curative, at the lowest cost compatible with efficient service."

On May 16, 1954 the House of Delegates of The Medical Society of New Jersey approved a resolution submitted by Medical Service Administration urging all U. S. Senators and Representatives to concentrate attention upon legislation designed to make adequate medical and hospital care available to indigent and medically indigent persons and further, "that these legislators be courteously reminded of the contribution already made by The Medical Society of New Jersey in the field of medical care of indigents, and medically indigent persons by the establishment of the effectively functioning Medical Service Administration of New Jersey, and that The Medical Society of New Jersey offer to collaborate with Senator Smith, Congressman Wolverton and other legislators in the development of an appropriate and satisfactory bill designed to provide adequate medical and hospital care for the indigent and medically indigent."

*A more detailed history of the development of Medical-Surgical Plan of New Jersey is to be found in an article by Dr. Edward W. Sprague, "Trends in Medical Care," in The JOURNAL of The Medical Society of New Jersey, 50:9, September, 1953.

Obituaries • • •

DR. JOSEPH ADLER

Bayonne lost its oldest medical practitioner on May 13, 1955, with the death on that date of Dr. Joseph Adler. Born in Hungary in 1877, Dr. Adler was graduated from the New York Bellevue Medical School in 1898. He came to Bayonne at the turn of the century and soon identified himself with the professional, civic and educational life of his adopted city. Long interested in medico-legal problems and rehabilitation, he became an expert in the field of industrial medicine. He was active in the affairs of the Hudson County Medical Society.

DR. PHILIP GROSSBLATT

At the early age of 53, Dr. Philip Grossblatt died on May 26, 1955. Born in Europe, Dr. Grossblatt came to Newark in infancy. After being graduated from the medical school of the University of Maryland and interning at St. Michael's Hospital, Newark, he entered private practice—first general medicine, later gynecology. He became a diplomate of the American Board of Examiners in Gynecology and Obstetrics.

Dr. Grossblatt was active in the staff affairs of the Presbyterian, Beth Israel and St. Michael's Hospitals, and in the New Jersey Anatomical and Pathological Society. During the war, he entered the Army medical corps with the rank of captain, and after 4 years—most of it in foreign service—was released as a colonel.

DR. H. WESLEY JACK

The Medical Society of New Jersey lost one of its most active members on June 20, 1955 when Dr. H. Wesley Jack of Wenonah died at the age of 61. Born in Collingswood in 1894, he was graduated from the Hahnemann Medical College in Philadelphia in 1917. He was in the medical corps of the Army in World War I and saw service on the western front. He returned to his native state in 1919 and was appointed to the staff of West Jersey Hospital in Camden, where he became chief of surgery in 1934.

Dr. Jack was a diplomate of the American Board of Surgery and a fellow of the American College of Surgeons. He was a member of the New Jersey Surgical Society and a delegate to the American Cancer Society. A past-president of the Camden County Medical Society, Dr. Jack was active on the Public Health and Welfare Committees of The Medical Society of New Jersey for many years, and at the time of his death he was chairman of the Cancer Control Committee of the Society.

DR. WILLIAM J. MATHEWS

More than a half century of active medical practice was terminated on Memorial Day 1955 with the death of Dr. William J. Mathews. Born in 1876, in Pottsville, Penna., Dr. Mathews first became a pharmacist. Then he entered the medical school of the University of Pennsylvania from which he received his M.D. degree in 1902. Dr. Mathews came to Hoboken immediately after being graduated and was engaged in active practice, mostly surgical, from 1902 to 1954. He was on the staff of St. Mary's Hospital in Hoboken. Dr. Mathews was one of the founders of the Hoboken Rotary Club.

DR. ERNEST W. MIERAU

Dr. Ernest W. Mierau of Irvington died on May 3, 1955, after a long illness. Born in New York in 1885, Dr. Mierau was graduated from the Jefferson Medical College in 1912 and then came to Irvington where he was one of the original members of the Irvington General Hospital staff when it opened in 1924. He was a lieutenant in the Medical Corps in World War I and a member of the Selective Service Board in World War II. Dr. Mierau was in private practice in Irvington for many years. He was active in the Irvington Physicians Club and in the affairs of the Irvington Reformed Church in his adopted city.

Announcements • • •

Orthopedic Award

A one-hundred dollar cash award awaits the intern or resident who submits the best original paper in the field of orthopedic surgery. This is sponsored by the New Jersey Orthopedic Society. The paper may cover any aspect of the field, such as pathogenesis, pathology, diagnosis or treatment. The work on which the paper is based must have been done during, and completed not later than six months after, the internship or residency in a New Jersey hospital. The paper should be submitted for the current award not later than January 15, 1956 to Dr. Arthur S. Thurm, 533 West State Street, Trenton 8, N. J. The award will be announced in time to permit inviting the winner to present his paper personally at the spring meeting of the Society.

Course in Radioactive Isotopes

The Mount Sinai Hospital announces a course in the clinical use of radioactive isotopes in affiliation with Columbia University. It will be given Thursday afternoons from 3 to 6 p.m., starting in October, 1955. The tuition fee is $200. For more information write to Postgraduate Medical Instructor, 11 East 100th Street, New York 29, N. Y.

Three-Day Gastro-Enterology Course

The American College of Gastroenterology announces a course in gastro-enterology in Chicago October 27-29, 1955. It will be under the direction of Dr. Owen H. Wangensteen and Dr. I Snapper. Drs. Wangensteen and Snapper will be assisted by a distinguished faculty.

The subject matter includes medical and surgical advances in diagnosis and treatment of gastro-intestinal diseases and a comprehensive discussion of diseases of the mouth, esophagus, stomach, pancreas, spleen, liver and gall bladder, colon and rectum, with special studies of radiology and gastroscopy.

For further information write to the American College of Gastroenterology (Department P.G.), 33 West 60th Street, New York 23, N. Y.

Courses at Mt. Sinai

An unusual variety of practical courses, full-time and part-time, extensive and intensive, is announced by Columbia University for the New York Mt. Sinai Hospital. Courses are available in the following subjects:

Pathology	Otoplasty
Neuropathology	Trans-meatal Surgery
Pediatric Cardiology	Isotopes, use of
Chest Radiology	Radiation Physics
Physiology	Radiotherapy
Cardiology	Neurology
Hematology	Gastro-Enterology
Minor Surgery	Laryngoscopy
Electrocardiography	Speech Therapy
Proctology	Audiology
Rhinoplasty	Obstetrics
Gynecology	Vascular Diseases

For details write to: Postgraduate Registrar, Mt. Sinai Hospital, 9 East 100 Street, New York 29, N. Y.

Course in Pediatric Allergy

Under the leadership of Dr. Bret Ratner, the New York Medical College is scheduling a course in pediatric allergy to be held on 30 consecutive Wednesdays from 9 a.m. to 4 p.m. The first meeting will be November 2, 1955 and the course will terminate May 31, 1956. Tuition fee is $300. Only certified or Board-eligible pediatricians will be accepted. For more information write to the Dean, New York Medical College, Fifth Avenue at 106th Street, New York 29, N. Y.

Course in Industrial Medicine

A well-rounded course in all aspects of industrial medicine is announced by the New York Post-Graduate Medical School for the fall term, beginning September 26, 1955. This is a full-time 8-week course covering administration, preventive medicine, occupational diseases, industrial injuries, toxicology and hygiene. Tuition fee is $250. For more information write to the Dean, New York Post-Graduate Medical School, New York 16, N.Y.

Prescriptions: For Those Who Write Them

Prescriptions are hardly ever seen in medical journals today—except maybe for papers on dermatologic topics. However, for the few physicians who still like an elegant prescription and who know what incompatibility means, here are some pointers.

Better write the prescription in English. To be sure, Latin is the sign of the educated gentleman, but the trouble is that only you and I know that. So better conform and write the Rx in English. Unhappily the use of Latin names for drugs is considered by the vulgar—and that means many people—to be an affectation. Indeed, most young physicians today are hopelessly bewildered by references to *Spiritus Menthae Viridus* or *Hydragyrum Chloridi Mitis*. Since you do want to be understood, it is safer to call them spearmint and calomel.

Sometimes the author is tempted to use the metric system, and then bring the quantity up to three ounces. This is improper since it represents a mixing of apothecaries' and metric nomenclatures.

It is no longer necessary to use the genitive case in writing prescriptions—and the problem will not arise if you use English words.

The symbol "℞" may be written on the typewriter simply as "Rx." It is not an exact mimicry but the printer will transcribe it to ℞.

The instructions following the prescription should be written in English, though they may be preceded by the Latin abbreviation "Sig."

Names of drugs are not abbreviated. Do not abbreviate "grains" or "Grams." Write the latter with a capital "G."

Some editors use only the metric system. For that reason, authors who prefer apothecaries' units must write the metric equivalent in the alternative. This gives the editor a choice. The use of the metric system exclusively is never wrong. In transcribing from one system to another, use clinically approximate equivalents. Thus, the table may indicate that five grains is the equivalent of 0.32 Grams. However, no pharmacist is going to measure out 0.32 Grams. Anyway, there is no clinical or therapeutic difference between 0.32 Grams and 0.3 Grams. Hence, write the equivalent as 0.3 Grams. The following table gives rounded number equivalents:

Milligrams	grains
0.1	1/600
0.2	1/300
0.3	1/200
0.4	1/150
0.5	1/120
0.6	1/100
1.	1/60
1.2	1/50

Milligrams	grains
1½	1/40
2	1/30
3	1/20
5	1/12
6	1/10
8	1/8
10	1/6
15	1/4
25	3/8
30	1/2
50	3/4
60	1
100	1½
120	2
200	3

Grams	grains
0.1	1½
0.2	3
0.3	5
0.4	6
0.5	7½
0.6	10
1.0	15
2.0	30
3.0	45
4.0	60
5.0	75
7½	120

Grams	drams
4	1
6	1½
7½	2
10	2½
15	4
30	8

If the author uses apothecaries' units, the text should be written in this style:

"Acetyl salicylic acid in five grain doses (0.3 Grams) was found ineffective, but when the pátient received fifteen grains (one Gram) relief was prompt."

Difficulty sometimes arises in converting "grains per pounds of body weight." For ex-

ample, suppose you recommend that for children, the dose be two grains per pound of body weight. Two grains represents 120 milligrams but it would be improper to write: "Two grains (120 milligrams) per pound of body weight" because that represents a mixing of systems. It is therefore necessary to convert pounds to kilograms as well as grains to milligrams. A pound, is roughly, half a kilogram. For most purposes this is accurate enough. The actual equivalent is 453.6 Grams, whereas a half a kilogram would be 500 Grams. Using this rough ratio, the conversion is simple. If the dose is two grains per pound, it would obviously be four grains per kilogram, and since four grains is equivalent to 250 milligrams, the sentence could read: "Two grains per pound of body weight (250 milligrams per kilogram of body weight)." If more accurate conversion is desired, use the figure 2.2 pounds as the equivalent of a kilogram. In the example given, this would require arithmetic computation as follows:

Two grains per pound means 2 x 2.2 grains per kilogram or 4.4 grains per kilogram. Four grains equals 250 milligrams. Four tenths of a grain equals 30 milligrams. Therefore the metric equivalent is 280 milligrams per kilogram of body weight.

For practical purposes, the difference between 250 and 280 milligrams is not enough to cause appreciable variation in therapeutic effect, and the much simpler computation, based on a pound equalling a half kilogram is accurate enough.

Drugs are written in lower case letters, not in capitals. You write "amphetamine" or "ergotamine" and not "Amphetamine" or "Ergotamine." There is one important exception. If the drug is a trade name, like Cedilanid®, Dicumarol®, Benzedrine® or Adrenalin®, then you must capitalize it. Reread page 148 of our March JOURNAL for more details on this delicate problem.

HENRY A. DAVIDSON, M.D.

The Research Dollar

Gone are the days of the lone researcher, pouring over retorts in the barn or the attic. Modern research is a matter of team work, in stream-lined laboratories with chrome plated gadgets. A single piece of modern research equipment may cost as much as a busy practitioner's annual gross income. Perhaps some new Curie, Pasteur or Koch may flash across the scientific firmament in the future, a lone worker with shabby equipment. But the odds are against it. The single, dedicated worker in his basement laboratory has probably gone the way of the one horse shay, the little black bag and the elegant four-ingredient prescription.

But the new research brings new problems. Finances did not seem so important when the major components of a research project were a high I.Q., a lot of sweat, an indefatigable body and spirit, and ten dollar's worth of wires, glassware and needles. It now takes a king's ransom just to investigate a proposal deep enough to find out if it is worth investigating further. And from what king will this ransom come? Government is wary of spending the tax-payer's dollar on a proposition that, 99 times out of a hundred, will just lay an egg. And science is chary of accepting Government's dollar unless it can be made unequivocally clear that he who pays the piper will *not* call the tune. The pharmaceutical houses, God bless them, do pour millions and millions of dollars into research projects in the hope that one in twenty will pay off. Sometimes the fruit of the research hurts the company that puts up the money. And it is not fair to place companies in *that* spot very often. Medical schools are good places for research, but medical schools have to pass the hat every once in a while just to make up their operating deficits. The big money for research probably has to come from the place where the big money is: which these days means the Foundations. And this is poetically just. Most of the Foundations draw their funds from business enterprises. It seems only proper that the money which came from consumers should now be used for their benefit. Of course there are some who just don't like the Foundations. None of these critics, however, have suggested any better source for the research dollar.

County Society Reports • • •

Burlington

President Luis E. Viteri opened the regular monthly meeting of the *Burlington County Medical Society* on April 14 at the Riverton Country Club. The speaker of the evening was Dr. Sherman F. Gilpin, Professor of Neurology at Temple University, School of Medicine. He discussed the differentiation of the functional from the organic in diseases of the nervous system.

The business meeting included discussion of entrance of the society in the medical-surgical hospitalization plan of New Jersey, and the continuation of our nursing scholarship to the Pennsylvania Hospital.

The society welcomed into new membership Dr. Edwin D. Harrington of Moorestown and Dr. Robert Heal of Delanco.

J. ARTHUR STEITZ, M.D.
Reporter

Cumberland

At their regular meeting on June 14, members of the *Cumberland County Medical Society* were guests of the Owens-Illinois Glass Company at its cabin on Palatine Lake. Dr. Nicholas E. Marchione, the president, called the meeting to order.

Dr. Mario Pastore's transfer from the Atlantic County Medical Society to the Cumberland County Medical Society was approved.

Dr. Arthur D. Sewall and Dr. Nicholas E. Marchione were unanimously elected as delegates to The Medical Society of New Jersey. The alternate delegate elected was Dr. Benjamin Berkowitz.

Announcement was made of the death on June 4 of emeritus member Dr. Charles B. Neal, who had been a physician in Millville for sixty-five years.

Four revisions of the Society's by-laws were voted upon and accepted. The first one was adopted in order to facilitate the entry of Service Fellows of the American Medical Association into the Cumberland County Medical Society. The second concerned the formation of a nominating committee of three members of the Executive Committee and three members of the Society at large to recommend one nominee for each impending vacancy in the offices of the Society. The third revision concerned the exemption from payment of dues of members called into the Armed Services of the United States. The fourth revision exempts the President, the Secretary, and the Treasurer of the Cumberland County Medical Society from the payment of dues during their official term of office.

The members accepted an invitation to hold the fall meeting on October 11 at Seabrook Farms.

After a greeting from our honored guests — Dr. Vincent P. Butler, President of The Medical Society of New Jersey, and Mr. Richard Nevin, Executive Officer, a magnificent outdoor picnic feast was served by the representatives of the Owens-Illinois Glass Company in their own inimitable style to the large number of members in attendance.

PAUL K. AYARS, M.D.
Reporter

Hudson

The annual meeting of *Hudson County Medical Society*, terminating the administrative year of 1954-55, was held at Jersey City Medical Center, on May 3. Dr. Edward G. Waters presided.

Elected to office for the administrative year of 1955-1956 were the following:

President—Dr. Sigmund C. Braunstein
President-Elect—Dr. John E. Annitto
Vice-President — Dr. Arthur P. Trewhella
Secretary—Dr. John J. Bedrick
Treasurer—Dr. Charles E. Rosen
Reporter—Dr. Charles A. Landshof

Regarding priorities and the administration of Salk vaccine, the Society went on record as endorsing the recommendations of the Advisory Committee of the National Foundation for Infantile Paralysis. When a supply of the vaccine becomes available for immunization of the general population, members of the Hudson County Medical Society agreed to administer it to their private patients at their usual fee for an office visit — plus the actual cost to them of the vaccine.

The firm of Merrill Lynch, Pierce, Fenner, and Beane, brokers in securities, provided as guest speaker, Mr. John G. Lord, Account Executive. The subject of Mr. Lord's presentation was "The Investor and Atomic Energy."

CHARLES A. LANDSHOF, M.D.
Reporter

Middlesex

The annual outing and dinner meeting for the *Middlesex County Medical Society* and the Middlesex County Dental Society was held at the Colonia Country Club on Wednesday, May 18.

Many of the doctors enjoyed golf in the afternoon. Prizes were subsequently awarded for the

lowest scores, as well as a consolation prize for the highest score.

An excellent steak dinner was served at the clubhouse. Dr. Charles Calvin, chairman of the Program Committee of the Middlesex County Medical Society introduced Dr. Bernard Weiss, president of the Dental Society; and Dr. Dunham, president of the Medical Society, introduced the officers of both societies.

Dr. S. David Miller acknowledged the donation of gifts by Falco Products, Johnson and Johnson and by a number of drug stores and dental supply companies.

Dr. Joel Fertig, Chairman of the Program Committee of the Dental Society, introduced the speaker of the evening—Dr. Houston Peterson, Professor of Philosophy at Rutgers University, and Moderator of the television show, "Leave It To The Girls." Dr. Peterson's talk was both philosophical and humorous and climaxed a most enjoyable affair.

IVAN B. SMITH, M.D.
Reporter

Monmouth

New Jersey State Hospital at Marlboro was host to the *Monmouth County Medical Society* at its regular meeting on May 25 with Dr. Howard Pieper, the president, in charge. Dr. J. Berkeley Gordon welcomed the Society on behalf of the hospital staff.

An interesting account of recent studies in psychosomatic medicine was given by Dr. Adrian Ostfeld of the Psychosomatic Section, Payne Whitney Clinic, New York Hospital.

Dr. Fred E. Eggers, Spring Lake, was accepted to membership by transfer from Bergen County Medical Society.

During the business meeting it was decided that a concerted effort be made to increase membership attendance at regular meetings. The executive secretary was instructed to publish in the county *Bulletin* the resolution adopted by The Medical Society of New Jersey concerning assessments of staff physicians by hospitals.

DONALD W. BOWNE, M.D.
Reporter

Morris

The *Morris County Medical Society* met in joint session with the Tri-County Dental Society on Thursday evening, May 19. Dr. Harold Hatch, president of the medical society presided and Dr. Bernard Swain, president of the dental society, addressed the group.

Dr. Sidney Brandt, program chairman of the dental society, moderated a panel on "Dentistry for the General Practitioner." He stressed the desirability of communication and understanding between the two organizations.

Dr. C. K. Botkin discussed "Fluoridation of Public Water Supplies" and compared the incidence of dental lesions in areas with natural or added fluorides in water with the incidence of such dental lesions in areas with no fluorides in water. Dr. Botkin made a strong bid for support of fluoridation of public waters.

Dr. William Themann then spoke on periodontia; he discussed the aims, methods and achievements in this new field of dentistry.

Dr. Leonard Szerlip discussed anesthesia for dental surgery and explained the agents and technics used in dental anesthesia.

Dr. Francis Devlin then developed the topic of pediodontics and detailed the problem of dental lesions in children. He particularly explained the relation of sugar with regard to lesions of caries.

ALBERT ABRAHAM, M.D.
Reporter

Passaic

The annual meeting of the *Passaic County Medical Society* was held on Tuesday, May 17, at the Medical Society Building, Dr. Joseph Jehl, the vice-president, in the chair.

Dr. Robert T. Dunn of Paterson was elected to active membership.

Dr. Theodore K. Graham, the treasurer spoke about the Building Assessments due in March of this year, which ended the five-year grace period for payment of the $100 assessment by those who were members in 1950, or before.

Dr. A. Gerard Peters made the following motion:

"That we do not immediately expel the members who have not paid the assessments due."

Thereupon Dr. Andrew F. McBride amended this motion to read:

"Expulsion from the Society be made after a period of time, which period is to be decided by the Welfare Council."

The amended motion passed.

Dr. Abraham Shulman read the Report of the Nominating Committee, as follows:

President—Joseph R. Jehl, M.D.; First Vice-President—Abraham Shulman, M.D.; Second Vice-President—Samuel C. Yachnin, M.D.; Secretary—Joseph F. Moriarty, M.D.; Treasurer—Theodore K. Graham, M.D.; Ass't. Treasurer—Frank B. Vanderbeek, M.D.; Reporter — David B. Levine, M.D.; Board of Censors (3 years)—Leopold E. Thron, M.D.; Building Trustees (3 years) — Leon E. De Yoe, M.D.; Wayne W. Hall, M.D.; Dean A. Wry, M.D.; Moses C. Sucoff, M.D.

Dr. Henry V. Weinert was nominated from the floor for the office of secretary. This was seconded.

Upon counting of the ballots, the original panel was elected by the membership.

A report of the Workmen's Compensation Committee, outlining a schedule of standard minimum fees for insurance claims was read and accepted.

A report of a meeting held by the Committee on Pharmaceutical Problems and the Committee on Professional Relations of the Passaic County Pharmaceutical Association was accepted.

DAVID B. LEVINE, M.D.
Reporter

Somerset

At the May 12 meeting of the *Somerset County Medical Society*, John L. Spaldo, M.D. was elected president for the 1955-56 year. Other officers elected were: C. S. McKinley, M.D., vice-president; M. E. Sanford, M.D., secretary; Homer E. Cook, M.D., treasurer; Martin E. Tolomeo, M.D., censor and William J. Albrecht, M.D., historian.

The following resolution was adopted:

"WHEREAS: Dr. Henry A. Craig has been a member of the Somerset County Medical Society for 25 years, and,

"WHEREAS: he has served the people of Somerville and vicinity in a conscientious manner during this time, and,

'WHEREAS: he has been a courteous and ethical contemporary of the physicians of Somerville, and,

"WHEREAS: his passing is a great loss to his fellow physicians and to his patients,

"THEREFORE, BE IT NOW RESOLVED: that the Somerset County Medical Society express their regret, send condolences to his family and that this Resolution be sent to his family, spread in the minutes of this Society and published in the local papers."

It was moved that the County Society approve the formation of the Somerset County School Physicians Association. After being fully discussed the motion was passed.

A number of other items of business were discussed and acted upon. The meeting, since it was devoted solely to business, was then adjourned.

C. S. McKINLEY, M.D.
Reporter

N. J. Dermatological Society

At the May meeting of the *New Jersey Dermatological Society*, the following officers were elected for the ensuing year: President, Dr. H. C. Goldberg, Plainfield; Vice-President, Dr. Bart M. James, East Orange; Treasurer, Dr. S. Fisher, Paterson: and Secretary, Dr. B. B. Burrill, Montclair.

B. B. BURRILL, M.D.
Secretary

N. J. Neuropsychiatric Association

The following officers were elected for the New Jersey District Branch of The American Psychiatric Association for the year 1955-56.

President: Dr. Frank Pignataro, Red Bank; President-Elect: Dr. Evelyn Ivey, Morristown; Secretary: Dr. Ira S. Ross, Newark; Treasurer: Dr. David McCreight, Marlboro; Trustees: Dr. Robert Garber, Princeton; Dr. William Furst, East Orange; Dr. Lumen Tenney, Trenton; Dr. Leon Reznikoff, Weehawken, and Dr. Floyd Fortuin, Paterson.

IRA S. ROSS, M.D.
Secretary

N. J. Orthopedic Society

The fall meeting of the *New Jersey Orthopedic Society* was held at Jersey City Medical Center, April 30 with Dr. Harold C. Benjamin as Program Chairman and Moderator.

The following scientific papers were presented:

Early Ambulation in Bilateral Fractures of the Tibia and Fibula Treated by Rush Nail Fixation—Joseph J. Ruvane, M.D., Jersey City. Discussion: Otto Lehman, M.D., Long Branch.

Scoliosis: Review of Treatment with the Lateral Flexion Apparatus—Vincent Scudese, M.D., Newark. Discussion: Alvin Arkin, M.D., New York City.

Oservations on the Use of Staples in Surgery About the Shoulder—Andrew Ruoff, III, M.D., Paterson. Discussion: Carl Maxwell, M.D., Morristown.

Unusual Carpal Injuries—Herman Frank, M.D., Bayonne, Francis Boyle, M.D., Bayonne.

Results Following Resection of the Elbow for Tuberculosis—Herbert M. Simonson, M.D., Newark. Discussion: Alfred J. D'Agostini, M.D., Newark.

Flexion-Adduction Deformity at the Hip in Spastic Paraplegia: A Method of Treatment—Harry Merliss, M.D., Hackensack. Discussion: Leonard Harris, M.D., Newark.

Calcified Tendinitis, Other than at the Shoulder —Marshall Bergen, M.D., Jersey City. Discussion: Kieth E. Haines, M.D., Camden.

The Present Status of Kenny Therapy: Method of Prevention and Treatment of Orthopaedic Deformities in Poliomyelitis—Marvin A. Steven, M.D., Visiting Orthopaedic Surgeon, Jersey City Medical Center; Claus Jungeblut, M.D., Professor of Biochemistry, Columbia University; Robert Ward, M.D., Professor of Pediatrics, New York University-Bellevue Medical College; Walter Thompson, M.D., Professor of Orthopaedic Surgery, New York University-Bellevue Medical College. Discussion: Robert J. Neville, Lt. Colonel, M.C., Murphy Army Hospital, Waltham, Mass.

BERNARD M. HALBSTEIN, M.D.
Reporter

N. J. Society of Clinical Pathologists

At the annual meeting of the Society held in Atlantic City, April 20, 1955, the following officers were elected for the ensuing year:

George L. Erdman, M.D., President
William T. Read, Jr., M.D., Vice-President
Robert Brill, M.D., Secretary-Treasurer

The Executive Committee in addition to the above officers will include:

Sylvan Moolten, M.D.
Thomas Rathmell, M.D.
William V. Young, M.D.
Joseph Greeley, M.D.

ROBERT BRILL, M.D.
Secretary

Society for Widows and Orphans

The *Society for the Relief of the Widows and Orphans of Medical Men of New Jersey* held their 74th Annual Meeting May 18 in Newark. This helping hand society of 634 New Jersey physicians with assets of nearly $100,000 has assisted the bereaved and distressed widows of its members for many years. The officers for the ensuing year are, President, Dr. Earl Leroy Wood, Newark; Vice-President, Dr. Berthold T. D. Schwarz, Montclair; Secretary, Dr. Herbert M. Ill, Glen Ridge; Treasurer, Dr. Harold A. Tarbell, Newark; Custodian of the permanent fund, Dr. Herbert A. Schulte, Newark. Newly elected trustees are, Drs. Joseph W. Graham and A. Julius Gordon, Newark; A. Russell Sherman, Montclair. Continuing trustees are Drs. E. Zeh Hawkes, Paul H. Hosp, William D. Miningham, Elbert S. Sherman, Alfred Stahl and Francis J. Tobey, all of Newark.

HERBERT M. ILL, M.D.
Secretary

Auxiliary Report • • •

Essex

On April 25, Mrs. Philip R. D'Ambola presided at an Executive Board meeting and a regular monthly meeting of the *Woman's Auxiliary to the Essex County Medical Society* at 369 Park Avenue, Orange.

Preceding the meeting, Mrs. Max Block arranged for a delightful tea in honor of the 26 new Auxiliary members and presented floral corsages to those present. Our total membership, to date, is 463.

At this meeting, the following officers were elected for the year 1955-56:

President-elect—Mrs. Harry E. DiGiacomo
First Vice-President—Mrs. William Miningham
Second Vice-President—Mrs. Thomas A. Messina
Recording Secretary—Mrs. Otto G. Matheke, Jr.
Treasurer—Mrs. Paul Aszody
Financial Secretary—Mrs. Don A. Epler
Directors — Mrs. Frank Bellucci, Mrs. Robert Citrino

Mrs. Otto G. Matheke, Jr. announced the winners of the annual Nurse Scholarship awards. Miss Joan Caldwell of Belleville and Miss Bernadine Virostek of Irvington were the recipients of the $500 scholarships and Miss Arlene Rauch of Nutley and Miss Marilyn McCloskey of West Orange were the winners of the $300 scholarships.

Following the meeting, Mrs. Harry E. DiGiacomo presented a program of interest to all the women. She introduced Mrs. Ruth Duvoisin, manager of the Newark Chantrey Beauty Salon of L. Bamberger and Company, who spoke on, "Good Grooming and Fashions in Beauty." One of our new members, Mrs. Charles J. Calasibetta drew the lucky number for an Augusta Berns Studio portrait and three other members won certificates for hair stylings at the Chantrey Salon.

The Woman's Auxiliary was one of the co-sponsors of a showing of the film, "Breast Self-Examination," held at the *Newark News* Auditorium on April 28. This was part of a Community Health Cancer Month program to show how women, through personal observation and good hygiene, can guard their health. Dr. James H. Brothers, of the Speakers' Bureau, Essex County Medical Society, was present at the film showing and answered questions from the audience.

Members of the Auxiliary served as hostesses at the Videclinic showing of, "Mental and Emotional Illness," at the Essex House, Newark, on May 9.

The annual luncheon-meeting of the Auxiliary was held on May 23 at Mayfair Farms, West Orange. Memorial services for deceased members were conducted at that meeting; and the new officers for 1955-56 were then installed.

MRS. THOMAS A. MESSINA,
Chairman, Press and Publicity

MRS. JOSEPH DI NORCIA,
Co-Chairman

Book Reviews • • •

Many of the reviews in this section are prepared in cooperation with the Academy of Medicine of New Jersey.

Lectures on the Thyroid. By J. H. Means, M.D., Pp. 113, Cambridge, Harvard University Press, 1954. ($3.00)

Busy physicians who enjoy increasing their medical knowledge quickly and painlessly will profit from this charmingly written volume. It represents the distillation of 40 years' experience in endocrinology.

The first lecture uses an analogy between the ductless glands of the body and the nervous system. It describes the organization of the hormones and the role of thyrotropic hormone in the economy of the thyroid gland.

The second lecture presents the chemistry of this complex gland in simplified fashion. The third lecture outlines the treatment of thyroid diseases while the fourth lecture propounds the theory that Graves' disease is a pathologic analogue of Selye's adaptation syndrome: "A type of response that persons of certain constitutional patterns make when they encounter certain adverse circumstances in life." The last lecture is a fascinating dissertation on iodine.

ROWLAND D. GOODMAN, M.D.

History and Conquest of Common Diseases. Edited by Walter R. Bett, M.R.C.S., Pp. 334, Norman, University of Oklahoma Press, 1954. ($4.00)

This book consists of seventeen chapters, by as many British and American authorities, each dealing with the history and conquest of a frequently encountered disease. The forerunner of this volume, *A Short History of Some Common Diseases,* was published in 1934 by the Oxford University Press. Intended then "mainly for students and practitioners of medicine, and possibly also for patients," it has long been out of print. The present volume is, therefore, virtually a new book. It, in turn, is intended "mainly for patients, but also for the medical profession."

Each disease is discussed by a different author. Contributors from the United States include Dr. George Rosen of New York City (communicable diseases); the late Dr. Lewis J. Moorman of Oklahoma (tuberculosis); Dr. Ralph H. Major of Kansas (Bright's Disease) and Dr. William G. Lennox of Boston on epilepsy. Other contributors, all well-known, comment illuminately on such subjects as appendicitis, arthritis and rheumatism, cancer, gallstones, heart disease, pneumonia, tonsils and adenoids, diseases of the endocrine glands, venereal diseases and malingering.

On the whole, these historical sketches afford good, informative reading. Written mainly for intelligent patients, this book will appeal to many members of the medical and allied professions. A list of pertinent references follows each chapter and a glossary of medical terms is included for the benefit of the lay reader.

FRED B. ROGERS, M.D.

Surgery of the Small and Large Intestine. By Charles W. Mayo, M.D. Pp. 340. Chicago, The Year Book Publishers, Inc., 1955. ($9.00)

K'ung Futze, generally known by his Latinized name, Confucius, is credited with having said that a picture is better than a thousand words. Dr. Mayo's book consists primarily of illustrations of operative technic with accompanying explanatory text. The illustrations are well done pen-line drawings, which for the most part are simple and easy to understand. In addition, for a brief handbook, it is surprisingly complete. These texts supplement but do not replace the lengthier standard volumes. Included in the text are sections on diet, pre- and post-operative care, and the management of certain specific problems, such as permanent ileostomy and colostomy. A thread of practical hints is woven through the book. If heeded, they should benefit the patient and result in better physician-patient relations.

The book has a number of shortcomings. The baseball inversion suture which the author favors, may not create a diaphragm, but it lacks the hemostatic qualities of the Connell suture, which is not illustrated. The latter also effects a far more satisfactory inversion. The text creates the impression that cotton is the material of choice for the sero-serous layer of all anastomoses, including those in the colon and rectum. I am not alone in believing that cotton should be avoided in anastomoses involving the large intestine. The author advocates end-to-end enterocolostomy whenever possible. Undoubtedly there are numerous ways to skin a cat. However, in many teaching institutions, there is a strong conviction that end-to-side enterocolostomy is the preferable method. Certainly, the natural ileo-cecal junction is end-to-side.

In the section on low anterior resection, the book omits the crucial consideration of how much rectum must be left as a bare minimum. If the sur-

geon cannot leave at least 5 to 7 centimeters of rectum after taking an adequate cuff of bowel beyond the lesion, the patient will lose the normal evacuatory impulse. This is much more serious than the likelihood of retrograde metastases, since for all practical purposes it leaves the patient with a perineal colostomy. In describing the repair of perineal hernias and rectal prolapse, the author has neglected the Roscoe Graham procedure, considered by most to be the best repair.

Perhaps most surprising, is the author's use of sulfanilamide in the abdomen or the sub-peritoneal pelvis space. Sulfas simply have no local effect in a closed space, especially if contaminated or purulent material is present. Most bacterial action produces an acid medium in which the sulfonamides are rendered inactive. Any effect is derived from absorption. Fatal cases of sulfhemoglobinemia have been reported after placing 5 Grams of powder in a serous cavity. If the drug is to be given, it is far safer by the enteral or parenteral route. Sulfanilamide is the least effective and most toxic of the sulfonamides. I had thought that the practice had fallen into disuse. However, to return to the musings of Confucius, the book is worth owning for the illustrations alone.

EMERY G. OTVOS, M.D.

The Pharmacologic Basis of Therapeutics. L. S. Goodman, M.D. and Alfred Gilman, Ph.D. New York 1955. Ed. 2. Macmillan. Pp. 1830. ($17.50)

Time was when medicines were the bases of Medicine. Until the development of modern surgery at the turn of the century, a doctor's learning was measured by his knowledge of pharmacology, pharmacognosy and pharmacy. Under the twin assaults of therapeutic nihilism and the advancing ingenuity and boldness of the surgeon the role of pharmacology rapidly dwindled. The doctor who once knew structural formulae and botanical materia medica was replaced by the practitioner who depended on diet, placebos and manipulation.

Within the area of pharmacy itself another revolution was going on. The manufacturing pharmaceutical house took over the function of the corner druggist reducing the latter to a transferer of pills from big bottles to little ones, or to a dispenser of bubble-gum, alarm clocks and paper-backs. The physician abandoned all effort to understand pharmacology. By 1940 or so, the average young physician knew no more about the structural formula of the barbiturates than he did about Planck's constant.

This was too bad. The proper study of the physician is surely medicines as well as Medicine. The good doctor ought to know the disposition of drugs in the human body just as he has to know dosages. He ought to know something about incompatibilities. He ought to understand toxicology. He ought to know more about issuing prescriptions than a first-aid man in a fire house. He ought to take pride in the fact that modern pharmacy has opened a wonderland of wonder drugs and that modern pharmacodynamics is a real intellectual challenge.

If his imagination can be fired by the richness of modern pharmacy, here is the book for him. Already a classic, this magnificent volume tells the reader what he ought to know about the sources, dosage, and fate of the drugs he introduces into the human body. It includes a charming monograph on prescription writing, a useful manual of toxicology, a basic treatise on pharmacology and a systematic run-down on the useful drugs of modern pharmacy. It is a book to be dipped into, a book to be chewed over, a book to be digested. Just leafing through its 1800 pages will make you proud of being a man of medicine.

HENRY A. DAVIDSON, M.D.

The Medical Care of the Aged and Chronically Ill. By Freddy Homburger, M.D. Pp. 253. Boston 1955. Little Brown and Company. ($5.75)

Probably unique in medical writing is this compact volume. It is so written that the physician will find valuable tips on the care of chronic and terminal illness, the nurse will get useful suggestions for her bedside chores and the layman will get an understanding of both the limitations and potentialities of medicine when faced with problems of chronicity, the senium or terminal illness.

The major chronic or terminal illness are taken up one by one. The author not only tells what drugs may be helpful but he tells you what dose to use, how to administer them and even what their trade names are. He discusses such usually neglected topics as the long-term management of the hemiplegic, the care of the generally debilitated patient, the problems of the management of a terminal carcinoma, the distressing complications (urinary, for instance) of chronic illness and what to do about them. He discusses bed sores and he discusses—with shrewdness and mellowness — the psychological components of caring for the chronically ill or senile patient. He includes such usually hard to find data as how to make propelling knobs for wheel chairs, how to prevent leakage around a catheter, how to apply traction in the home, how to set up a simple tidal drainage apparatus, how to set up oxygen apparatus in a poorly equipped home and so forth.

I know of no other $5.75 investment that will buy as much as this book will furnish. The text is, incidentally, enlivened by several poignant sketches from the inimitable pen of Raoul Dufy.

VICTOR HUBERMAN, M.D.

TUBERCULOSIS *Abstracts*

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

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The Elimination of Tuberculosis from the Midwestern States in the Next Fifty Years

By David T. Smith, M.D., Diseases of the Chest, December, 1954.

The National Tuberculosis Association was founded fifty years ago. At that time the public believed that tuberculosis was inherited and that to plan its control was a utopian dream. The death rate in the death registration area was 200 per 100,000, with the major part of the deaths in infants and young adults. In the northeastern states nearly 100 per cent of the population had a positive tuberculin test by the age of 20. There were only a few thousand beds for patients with tuberculosis in the entire United States. The x-ray technic for finding tuberculosis was undeveloped and case-finding clinics as we know them today were non-existent. There were only two encouraging factors: deaths from tuberculosis had been almost twice as frequent 50 years before and a new organization had dedicated itself to the elimination of this dreadful disease.

It is probable that the death rate from tuberculosis in the midwest was never as high as in the northeast. There the standard of living was higher and the opportunity for infection was less than in the more crowded northeastern states.

By 1920 in the midwest there were enough sanatorium beds to isolate and treat most of the known active cases. However, many cases were missed until the x-ray method had been perfected and larger segments of the population x-rayed.

There are no accepted criteria for determining when tuberculosis is under control in an area. It is suggested that tuberculosis be considered under control when the death rate is five or less per 100,000 of the population and five per cent or less of the school population have positive tuberculin tests. Wisconsin is approaching this goal of control; the death rate for 1952 being 6.5 and tuberculin tests in school children in 1950 five per cent positive. The other midwestern states are approaching the status of control.

When tuberculosis is under control then we can begin to plan for its eradication. To consider the crude overall death rate alone is misleading. The age and sex groups which harbor the remaining reservoirs of infection must be known.

The most striking feature of the 1950 figures is the steady rise in the Wisconsin death rate for men from a low of 0.1 at the age of 12 to 61.2 at the age of 85. The chief reservoir of tuberculous infection is now in males over 40 and females over 60 years of age. This is the seed bed from which the next generation will be infected unless all of the active cases are detected, isolated, and treated.

Almost as many new cases are being found now as were being found when the death rate was four times as high. Indeed, one may conclude that the present death rate is an artificial condition brought about by early diagnosis, better medical and surgical treatment, and is not the result of a natural decrease in either the prevalence or severity of tuberculosis. If treatment should continue to improve we might find ourselves in an anomalous situation in which there were no deaths but with a continuing heavy load of active cases in our

hospitals. The greatest defect in our present methods of control is the lack of specific information in regard to the number, age and sex distribution of individuals who have been infected.

The percentage of positive tuberculin reactors is an indirect measure of the amount of undetected open tuberculosis in the community. A positive tuberculin test pinpoints the individuals in the group in which new active cases will develop. A recent conversion from a negative to a positive tuberculin reaction means that there is an active case among the converter's asosciates. There is a rough correlation between the percentage of the population with positive tuberculin reactions and the number of clinical cases and the number of deaths from tuberculosis.

In 1950 in Wisconsin there was an average rate of 1.7 deaths per 100,000 for the age group under 20 and 26 per 100,000 for the ages of 50 to 80. The school children in Wisconsin have five per cent positive tuberculin reactors and it is assumed that the older groups have a tuberculin rate of 50 per cent.

The corresponding data from Minnesota for the year 1952 shows a death rate of 0.7 per 100,000 in the age group under twenty years of age and in the age group of 50 years and older a rate of 19.4 per 100,000. The tuberculin rate in school children in Minnesota is now about three per cent in contrast to 50 per cent for adults over 50.

Larger samples of tuberculin tests especially among adults of different ages are needed. When the data are available it may be possible to predict from the percentage of positive tuberculin reactors the expected annual number of new cases and of deaths from tuberculosis.

As the program for the elimination of tuberculosis progresses, intensive x-raying of certain segments of the population will probably replace general mass x-ray surveys. Repeated annual x-rays on males over 40 and females over 60 would yield many active cases of tuberculosis, of carcinoma of the lung and of heart disease. Ideally, each individual with a positive tuberculin reaction should be x-rayed every year.

The routine x-raying of general hospital admissions has yielded from two to ten times as many active cases of tuberculosis as mass x-ray surveys in the same areas. Before long it will be more economical to carry out admission tuberculin tests on all patients under 40 years of age followed by an x-ray of all positive reactors and continue to x-ray individuals over 40. The same method of tuberculin testing and x-raying could be carried out by private practitioners of medicine.

The key to the elimination of tuberculosis is the tuberculin test which tells us which individuals have living virulent tubercle bacilli in their bodies. An annual x-ray of tuberculin reactors should detect the disease early enough to cure the patient before the infection of others. Routine annual x-rays, without tuberculin tests, should be continued for the heavily infected group of individuals who are now 40 years of age or over.

Some may be shocked by the suggestion that 50 years would be required to eliminate tuberculosis from the midwestern states. This is a conservative estimate based upon assumptions such as: no disturbance in our present high standard of living, no catastrophic war or social upheaval, an increase in case-finding programs and a maintenance of the present sanatorium system with its expensive medical and surgical treatment.

The long incubation period for the development of clinical tuberculosis explains the long time required. To this must be added the prolonged persistence of tubercle bacilli in the bodies of those who have been treated and are apparently well. All physicians can recall instances where a person was "cured" in his twenties and has remained well until he relapsed in his seventies. Even more disturbing is the young child who is infected and does not develop clinical tuberculosis until old age.

Leprosy is the only other human disease which has a comparable long incubation period and a comparable long period of infectivity. Leprosy was eliminated from Europe between 1300 and 1600 A.D. by an intensive program of isolation. It required 300 years to eliminate leprosy from Western Europe. It did not disappear spontaneously and persists even today in tropical countries.

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Notes on the Diagnosis and Management of "Dizziness"

II. False Dizziness

1. Romberg's Sign

The patient stands with his feet together and his eyes closed. Inability to maintain equilibrium may indicate locomotor ataxia or sclerosis of the posterior columns of the spinal cord (tabes dorsalis).

2. Inability to Walk a Straight Line

3. Inability to Stand on One Foot

A patient's inability to stand on one foot without lurching may be a helpful test in distinguishing between "dizziness" which is purely psychogenic and that which is of organic origin.

False dizziness is a sensation of sinking or lightheadedness which is often of psychogenic origin. It should be distinguished from true "dizziness" or vertigo[1] in which there is a definite whirling, moving sensation.

Unsteadiness, lightheadedness and similar manifestations of false dizziness[2] may be psychogenic or the result of arteriosclerosis, hypoglycemia, drug sensitivity and general metabolic disturbances such as anemia and malnutrition. Hypertension is often the cause of these symptoms.

Psychogenic dizziness probably originates at the highest brain centers. It may be described as a sense of uncertainty with occasional mild lurching but not to the point of falling. In these patients there is no nausea, no disturbance of vestibular pathways and otologic and neurologic examinations are negative. The sensation is unaffected by head movement. Symptoms usually disappear[3] with complete rest.

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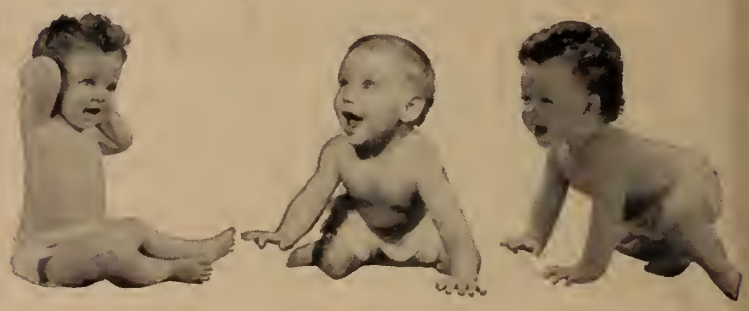

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(1) Jeans, P. C., in A. M. A. Handbook of Nutrition, ed. 2, Philadelphia, Blakiston, 1951, pp. 275-278.

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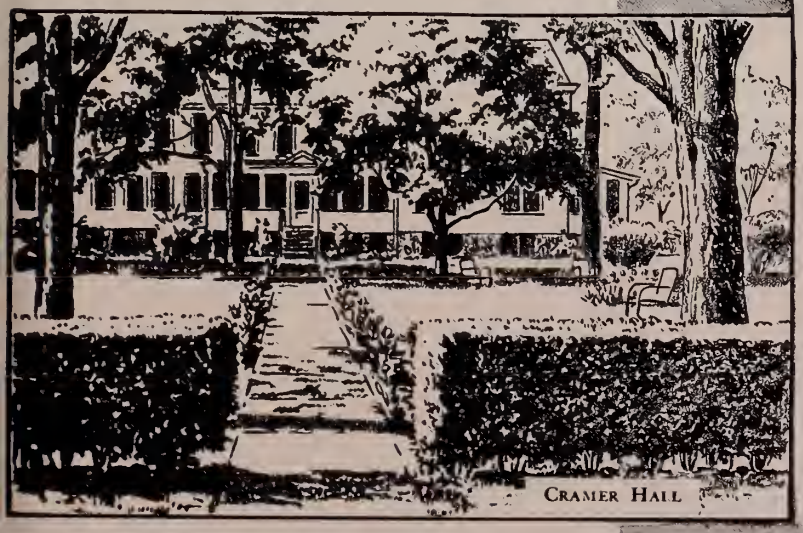
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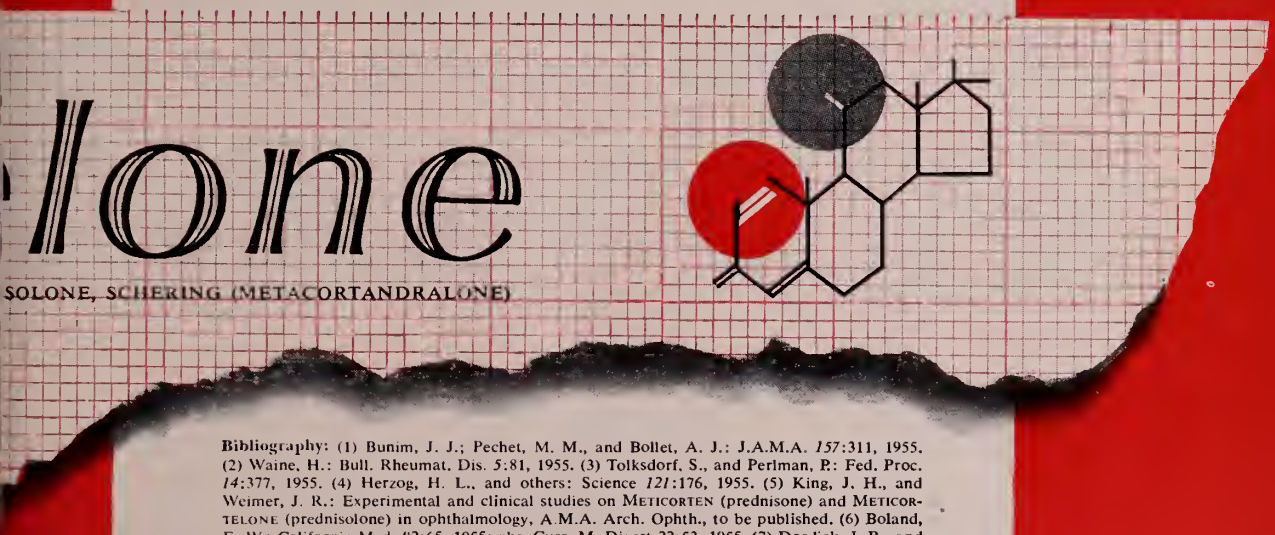

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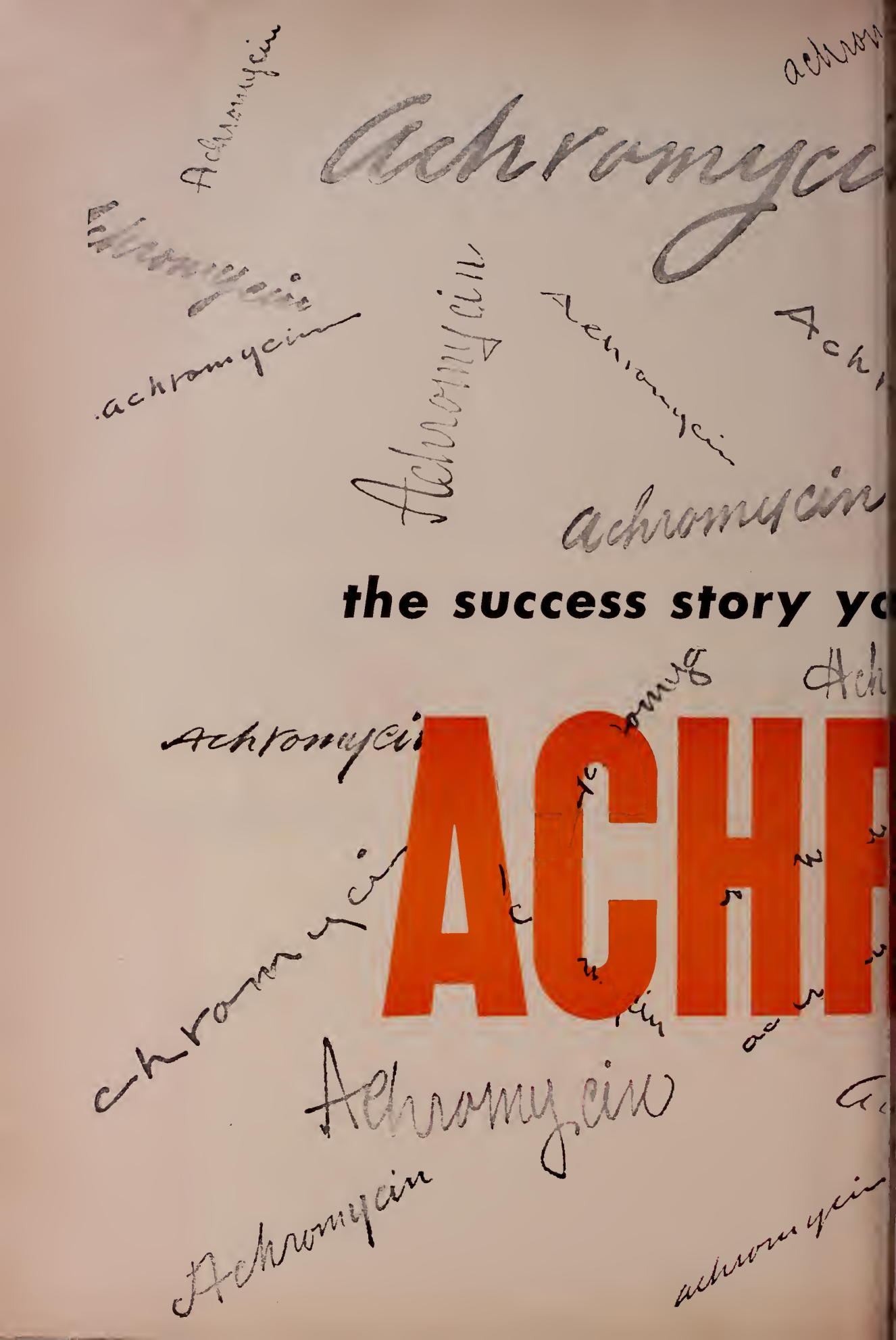
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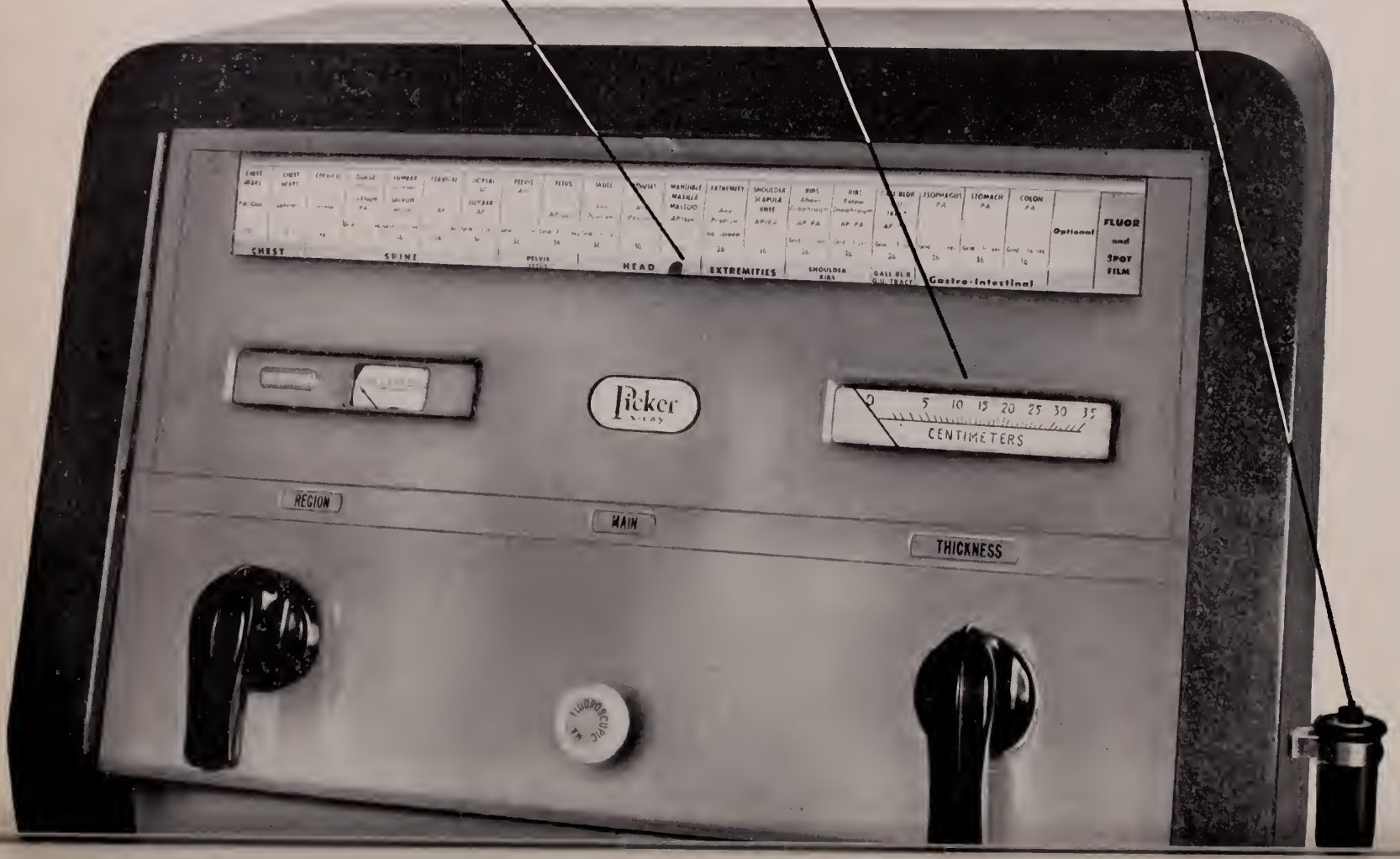

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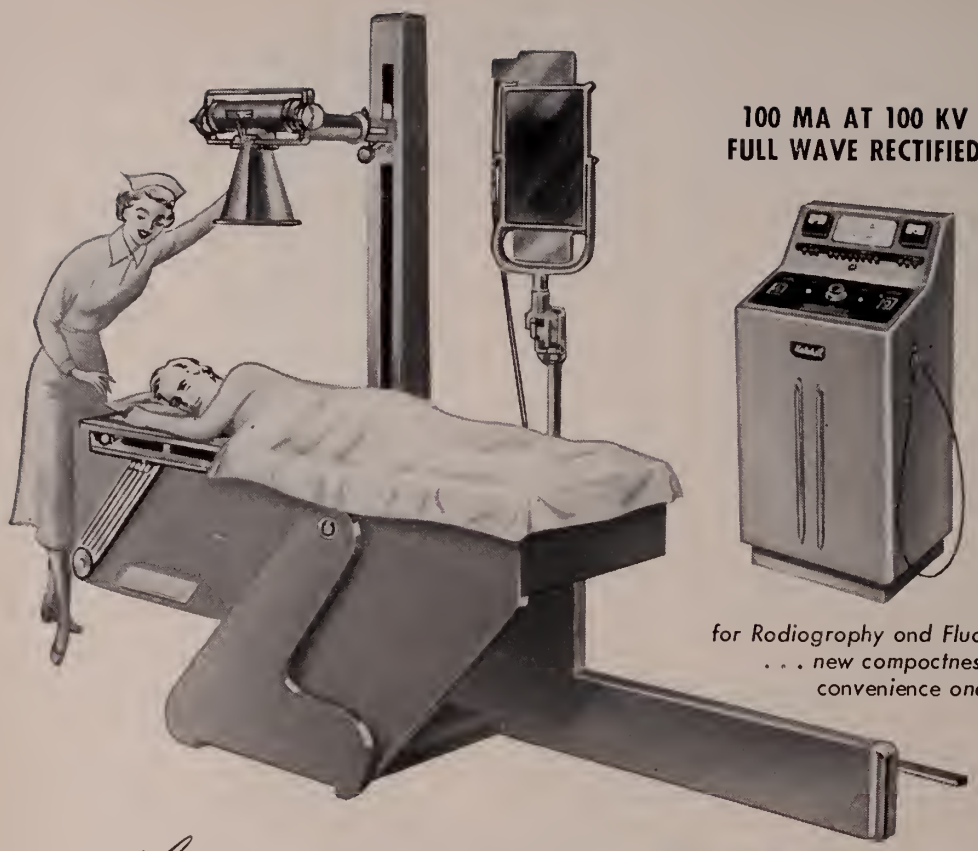

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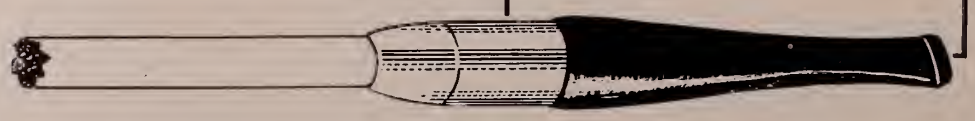

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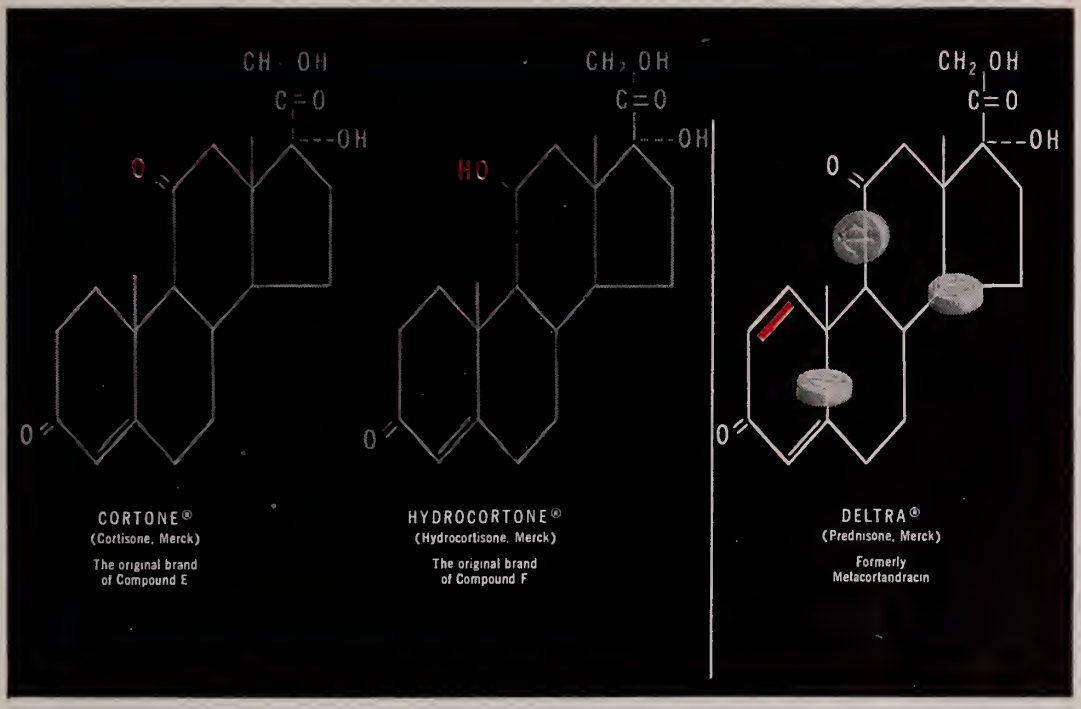

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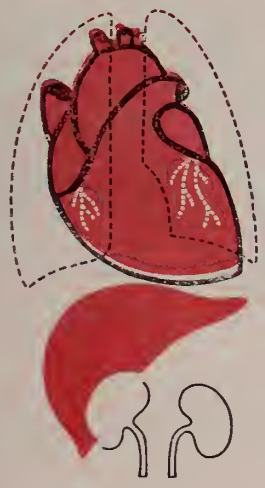

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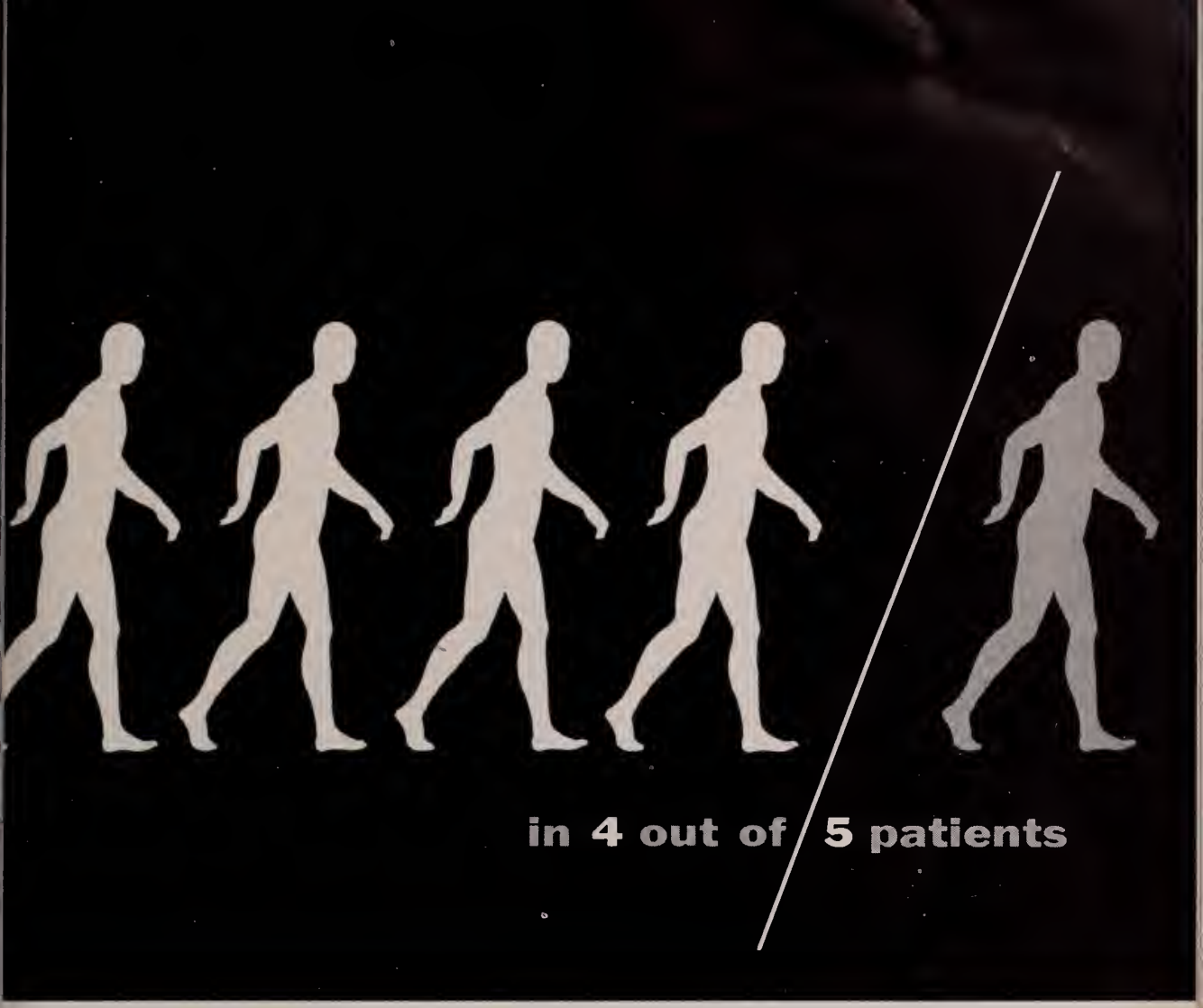

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1. Winsor, T., Humphreys, P.: Angiology *3*:1 (Feb.) 1952.
2. Plotz, M.: N. Y. State J. Med. *52*:2012 (Aug. 15) 1952.
3. Dailheu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.
4. Russek, H. I., *et al.*: Am. J. M. Sc. *229*:46 (Jan.) 1955.

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Editorials • • •

Science and the Human Touch

Two outstanding features of medicine in the mid-century compared to medicine at the start of the century are (a) that it is now a science and was then an art, and (b) the turn-of-the-century physician was a beloved universally respected and influential figure in the community, whereas now he is too often just another professional man if he is not, indeed, viewed with suspicion as being too prosperous and too hard to get hold of. At first it might seem as if these events are unrelated. But on second thought one is forced to conclude that this is beyond a casual coincidence.

The doctor of 1905 learned to depend on his own senses because he lacked the exquisite and precise diagnostic instruments now available. He had to estimate blood pressure by feeling the radial artery, temperature by touching the cheek, and the possibility of diabetic coma by the odor of the breath. Thus there developed the skilled artistry of the medical practitioner which seems so unnecessary today. These technics required direct physician-patient contact. Touching a fevered brow meant soothing a fevered brow. The intimate pressure on the wrist needed to estimate blood pressure established in a literal as well as a figurative sense a warm and friendly contact between doctor and patient. The electrocardiogram is wonderful but it interposes a piece of machinery between physician and patient. So many diagnostic methods have been transferred to the anonymous laboratory technician and so many therapeutic technics have been delegated to nurses and "therapists" of various stripes that the physician is more like the operator of a switch board than he is like a medical attendant. The famous photograph of the doctor gazing with tender thoughtfulness at the child on a sick-bed is distinctly dated. The doctor today wouldn't have time to sit and gaze. Anyway the child would be in

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a hospital not at home and a corps of technicians would have been swarming around him.

So the advance of medical science did impair the human touch in the doctor-patient relationship. The current passion for delegating more and more work to aides, technicians, secretaries, nurses, therapists and even receptionists will continue to interpose more barriers between doctor and patient. Will the replacement of the doctor's tender care by efficient therapeutic machinery save any more lives? One wonders.

Illness the Leveller

The president of the company and his janitor are on the same plane when each lies on his belly, his buttocks in the air, awaiting the proctoscope. When a woman is swallowing a stomach tube or receiving a colposcope, then, truly, Judy O'Grady and the Colonel's lady are sisters under the skin.

Illness is a leveller not only because—with their pants down—all men are equal, but also because fear wipes out arrogance and crumbles dignity. Faced with fear of pain, fear of death, fear of disability, all men react according to their temperament and not according to their social caste or income tax.

So it is—or so it should be—that physicians make the best apostles of democracy and the poorest supporters of a "master race" thesis or a "class dictatorship." For, as every physician knows, there are no commissioned officers in the ranks of the frightened, the pained, the crippled or even in the ranks of the undressed. In that army we are, indeed, all brethren and sistern.

Novel Approach to Public Safety

In Warrenton, Virginia, the Fauquier County Medical Society urged state highway officials to post a stop-light at a dangerous intersection. The bureaucrats of the land of Patrick Henry said 'no.' So another approach was tried. A delegation consisting of two physicians and an undertaker called on the Old Dominion's highway officials to urge that *no* stop-light of any sort be erected there. The hazardous intersection, explained the delegates—dead-pan, of course—was so profitable to them that they wanted it to remain.

P.S. They got the stop-light.

P.P.S. One's imagination staggers at the possibilities here. Dentists could picket the reservoir with signs "fluoridation is unfair to our business; takes candy out of *our* babies' mouths." Plastic surgeons could campaign for repeal of Safe-and-Sane-Fourth-of-July legislation. Venereologists could demand that penicillin and antibiotics be barred from interstate commerce. Cancer surgeons could join the cigaret companies in pooh-poohing you-know-what. They would get an assist from peripheral vascular surgeons who stand to lose some amputation "business" if people cut down on smoking. Ophthalmologists could demand smaller television screens, and physicians generally could argue that every American has a right to make a fool of himself. Only the psychiatrists would have no one to picket, since nothing has yet been found that materially reduces *their* case load.

Physicians direct their public educational efforts at trying to put themselves out of business. Maybe a reverse approach would get results.

HENRY B. KIRKLAND, M.D.*
Newark

Diagnosis and Prognostic Evaluation of Systolic Murmurs

America's life insurance companies have in their files one of the world's largest collections of actuarial data on cardiac deaths. This unusual paper taps some of these data and offers a number of practical prognostic tips in human cardiology.

CARDIAC murmurs have been an integral part of the diagnostic picture since the introduction of auscultation by Laennec. Recognition of the significance of certain murmurs, notably those occurring in diastole, was an early development. Grave malformations of congenital origin and serious acquired deformities were identified with remarkable accuracy during the last century. However, the evaluation of murmurs most commonly encountered in the course of physical examination, those timed in systole, has remained to this day a most difficult problem. It is with these that this discussion will be concerned.

Mackenzie,[1] over 40 years ago, observed that "to the human mind, sounds arising from obscure causes have always been a source of mystery," and that "the human imagination, when dealing with the mysterious, invariably associates it with something malign." There can be no question of the fact that over a long period of time the presence of a murmur was considered an indication of organic heart disease. No one can estimate how many lives have been lived out in the shadow cast by restrictions based not on the correctly diagnosed existence of an organic impairment, but on the presence of a physical sign.

As our knowledge of anatomic and physiologic considerations has widened, there has been a swing of the pendulum in the other direction. We have passed through a period in which there has grown a tendency to disregard systolic and even some diastolic murmurs as of little consequence. In a large measure this has been due to a failure to point up adequately long-term observations of the natural history of functional and organic states involving the description of varying types of murmurs. There have been numerous excellent clinico-pathologic studies which have demonstrated accurately correlations between symptoms, signs, progress, and necropsy findings. Little attention has been paid, however, to the evaluation of the long-range implications of the finding of murmurs in individuals who, at the time of examination, were neither in failure nor conscious of symptoms suggestive of deficient cardiac function.

The suggestions and data which follow represent an attempt to bring the pendulum back into the perpendicular and to limit its swing to a relatively small arc. It is proposed to outline the characteristics of the principal systolic murmurs, as studied by the time-honored methods of palpation and auscultation, to show that the results of such observations may be a

---

*Medical Director, The Prudential Insurance Company of America. This paper was read at the 189th Annual Meeting of The Medical Society of New Jersey, Section on Cardiovascular Diseases, April 20, 1955.

1. Mackenzie, James: Diseases of the Heart, 3rd Edition, 322, 1914.

measure of ultimate prognosis, and to support these clinical conclusions by certain actuarial data.

APICAL SYSTOLIC MURMURS

THE very comprehensive 1951 Impairment Study of the Society of Actuaries,[2] in which an advisory committee of The Association of Life Insurance Medical Directors of America collaborated, demonstrated conclusively that apical systolic murmurs are those most frequently encountered in cardiac examinations. It was shown that accurate evaluation was essential to establish the vital distinction between a non-organic physical sign and one reflecting an organic cardiopathy.

An apical systolic murmur with a documented rheumatic fever background must be taken as presumptive evidence of a true valvular deformity unless time and other evidence disprove the premise. To be sure, a benign murmur may have been present before the attack of rheumatic fever, or it may have been modified as a result of the acute infection. It is also recognized that rheumatic fever may occur in a form so mild or atypical as to escape diagnostic recognition.

It would seem essential, therefore, to turn to other criteria to establish differentiation. Clinically, we have in the evaluation of the auscultatory phenomena the most valuable guide to the identification of the true condition. Is the murmur constant in all body positions and in the various respiratory phases? Does it occur immediately after the first heart sound, or is there a perceptible interval? Is it heard in a circumscribed area at or in the neighborhood of the apex, as determined by palpation or percussion? Is it heard over a wider area, perhaps as far to the left as the axillary line or even in the interscapular space? Or is it clearly of maximal intensity within and slightly above the apex? Is it soft or blowing, or is it rough or harsh even to the point of producing a thrill? And what is the effect of exercise? Similar considerations apply to the differential diagnosis of basal murmurs.

These points may seem absurdly simple. Yet we do not direct sufficient attention to them. We can never be absolutely sure of the significance, in any single individual, of any bruit constantly synchronous with some phase of the cardiac cycle, but we can certainly predict probabilities in the large majority of cases, and act accordingly in advising the subject. The louder and more widely spread the murmur, especially if early in systole and accentuated after exercise, the more likely it is to be of organic origin regardless of whether we can elicit a related history. The softer and more circumscribed the murmur, particularly if it is inconstant as defined, the less chance there is of its being organic in character.

We are to expect a greater morbidity and mortality with murmurs graded four to six than with those graded one or two, but such classification, and every other one, for that matter, leaves us with a borderline zone in which it is difficult or impossible to predict the probable source or the outcome. There is to be considered the inevitable variability in the acoustic acumen of the observers, and there would appear to be, as yet, no method of recording heart sounds and murmurs which can substitute, in common practice, for the application of the stethoscope. It should be stressed here, also, that it is of little moment what terminology is used to designate physiologic as opposed to pathologic. The one murmur is considered to have no structural basis, or at least none of deleterious effect. The other represents anatomic damage of some kind, with all of the implications inherent in the resulting faulty cardiac dynamics.

THESE are general principles. There are other factors to be considered. Can we adduce evidence that a murmur noted on a given examination was not present at some prior date? At the younger ages, the appearance of such a murmur has to be taken to mean that there has been an attack of rheumatic fever, unrecognized clinically. At older ages, one can only surmise that arteriosclerotic endocardial changes have occurred, although more rarely rheumatic fever may be responsible in the later decades also.

2. Impairment Study, Society of Actuaries, 1951.

What, also, of the size and shape of the heart by x-ray and fluoroscopy? Here we must be cautious. Valvular insufficiency may not be reflected radiologically in all cases. However, an unequivocally normal cardiac silhouette provides potent support in most instances for the diagnosis of a non-organic disorder, especially when the murmur is soft and circumscribed. The electrocardiogram is much less likely to be of assistance in this connection. In the presence of an abnormal pattern, the physical signs are almost sure to be so prominent as to leave little or no question of the diagnosis of organic disease.

Finally, we have symptomatology. This must be most carefuly scrutinized when it appears significant in the face of physical findings which seem of little moment. It may be taken as a sound rule subject to few, if any, exceptions, that subjective manifestations do not occur with soft localized murmurs in hearts without chamber enlargement. When symptoms are present under such circumstances, it is justifiable to suspect a functional state based on earlier mis-diagnosis and the resultant chronic apprehension.

LOCALIZED APICAL SYSTOLIC MURMURS

TURNING to the statistical material emanating from the insurance studies to which reference has been made, we find, first, that about 10,000 individuals were followed who presented, on examination, constant localized apical systolic murmurs. These were not known to have had x-ray or fluoroscopic studies for diagnosis, and gave no history of rheumatic fever. They were insured during the years 1935 to 1949, inclusive, and were traced through to their policy anniversaries in 1950. The average duration of exposures was slightly more than six years. The number of deaths was compared with the number to be expected in the total group of medically examined cases, considered standard risks, originating within and distributed through the same 15- year period.

There are distinct limitations to this approach. Many physicians make the reports on which these statistics are based. There is great variation in their ability to observe and describe physical findings such as murmurs. Dr. Harry Dingman, a revered colleague and most astute observer,[3] has said that the insurability problem with heart murmurs is "Who hears what?" Insurance examinations cannot always be carried out under optimum conditions. Except in special circumstances, the clinical impression cannot be supported by other evidence, such as that afforded by x-ray or fluoroscopy. On the other hand, there is the compensating factor of very large numbers of cases, evaluated with a considerable degree of underwriting uniformity. The statistical data are based on actual versus expected deaths, and not on the incidence of morbidity. There is little doubt of the broad validity of certain conclusions drawn from the resultant figures. These same conclusions do not apply in any instance to the estimation of the expectancy of any one individual. The application is only to substantial groups of persons who present identical, or nearly identical, physical signs or identified anatomic conditions.

A GROUP of "normal" individuals has a "mortality appraisal" of 100 per cent. This merely says that in any large group of normal individuals, a given number will be expected to die during any specified time interval. If, for instance, it is known that 100 of 10,000 "normal" persons are to succumb annually in the natural course of events, and in effect exactly this number *do* die, this is reckoned as 100 per cent or standard mortality. This 100 per cent does *not* mean that everyone dies within the stated period, but that the ratio of actual to expected deaths is one to one, that is 100 per cent.

Table 1 shows a simplified basic table, demonstrating the number of deaths to be expected per 1,000 insured individuals in various age groups and during different policy years, or years following the date of issue. Decimals have been deleted. This is the table covering

3. Dingman, Harry: Risk Appraisal, 2nd Edition, 368 (1954)

standard or "normal" insurance risks with which comparisons will be made throughout. It is unnecessary to remember these figures. It is necessary to recall only that, in all categories, some deaths are always expected; these are the 100 per cent against which the effect on mortality of various impairments are measured. *See Table* 1.

TABLE 1.

BASIC TABLE 1935-1950

MORTALITY RATES PER 1,000

POLICY YEARS

Age at Issue	1-2	3-5	6-10	11-15
15-29	1	1	1	2
30-39	1	2	3	5
40-49	3	4	7	12
50-64	7	13	20	31

Let us now consider the constant localized apical systolic murmurs. We find that the 10,000 individuals presenting only this physical sign, showing no physical impairments otherwise, and followed for an average of six years (but in many cases up to 15 years) experienced a slightly increased mortality ratio. In this group, as in all others considered, deaths from heart disease accounted for most of the excess mortality. *Table* 2 shows the relation of actual to expected deaths by ages at issue.

TABLE 2

APICAL SYSTOLIC MURMURS

CONSTANT, LOCALIZED

	Deaths		Mortality Ratio
Age at Issue	Actual	Expected	Per Cent
15-29	52	31	170
30-39	60	43	141
40-49	87	65	134
50-64	70	56	126
15-64	269	195	139

Normally, extremely few deaths occur among young subjects. Consequently a slight excess in numbers of deaths will markedly affect the ratio. These figures strongly suggest that great care is necessary in evaluating murmurs of this description at the lower ages. A significant number of these persons had rheumatic carditis (active or inactive) but the physical signs were not prominent at the time of examination. There being no related history, the murmurs were in some instances erroneously classified as non-organic. With increasing age at issue, the mortality trends constantly downward, suggesting that murmurs are, when discovered in older people, less likely to have been associated with rheumatic fever. Since above age 50 arteriosclerosis may involve the endocardium in such a manner as to produce a murmur, it is remarkable that the most favorable experience is encountered in this upper age group.

Consider next the inconstant apical systolic murmur, without significant history, again presumed to be unaccompanied by hypertrophy, although radiologic proof is lacking. To individuals in the study presenting this finding alone, some 7600 policies were issued. There was no distinct trend in mortality by age at issue, and the favorable nature of the experience is striking, as shown by *Table* 3.

TABLE 3.

APICAL SYSTOLIC MURMURS
INCONSTANT

	Deaths		Mortality Ratio
Age at Issue	Actual	Expected	Per Cent
15-29	27	24	110
30-39	41	41	101
40-49	67	54	125
50-64	41	40	103
15-64	176	159	111

Summarizing the experience with over 17,000 persons presenting as the only evident physical impairment localized constant or inconstant apical systolic murmurs without a known history of rheumatic fever, it is noted that the mortality experience is generally favorable. It is evident, clinically, that an inconstant murmur is less likely to have a rheumatic background than one that is constant, although exceptions occur. The figures shown indicate that the inconstant murmur leads to a mortality only slightly greater than normal or standard. The constant murmur does produce a definitely

contracted group expectancy, although not to an alarming degree and much more striking at the younger than at the older ages.

These are the murmurs which would be graded as 1 or 2 clinically. They are those which we would tend to call non-organic or physiologic. Both clinical experience and these actuarial statistics seem to demonstrate that they have relatively little adverse effect on longevity, and we are justified in taking an optimistic view, prognostically, although as clinicians we are called upon to exercise mature judgment in identifying those subjects who are most likely to require occasional re-examination. The clinician, furthermore, has an additional diagnostic instrument which will give him a more complete and accurate picture than that afforded the insurance underwriter. It should be noted that, in this whole study, the number of cases in which the results of roentgenographic study were available was too small to permit valid statistical conclusions.

NON-LOCALIZED APICAL SYSTOLIC MURMURS

Proceeding to a consideration of the more extensive apical systolic murmurs, it is necessary to remark on the traditional though unfortunate term "transmitted." This ancient concept is difficult to eradicate. The so-called "transmission" of a murmur is only a factor of its loudness. The greater the intensity, the more likely it is to be heard over an area extending beyond that of the immediate apex. It is a reasonable assumption, also, that the louder apical systolic murmurs are more likely to be heard to a considerable distance laterally than medially, and hence we can view with some equanimity the fact that the next category to be presented actuarially is defined as "apex murmurs, systolic, constant, transmitted to the left, without hypertrophy," the latter status not being established radiologically as was the case also with the localized murmurs.

Table 4 demonstrates how much more adverse the mortality is in this group. This is particularly striking in that there were almost 19,000 policies in this classification. These were on persons who gave no history of rheumatic fever. The contrast with the experience shown for cases in which the murmur was described as localized, whether constant or inconstant, is obvious, as is shown in *Table* 5, which summarizes the mortality ratios in the three main groups so far presented.

TABLE 4.

APICAL SYSTOLIC MURMURS
CONSTANT, TRANSMITTED TO LEFT

Age at Issue	Deaths		Mortality Ratio
	Actual	Expected	Per Cent
15-29	188	58	325
30-39	178	78	227
40-49	248	118	210
50-64	120	79	152
15-64	734	333	220

TABLE 5.

APICAL SYSTOLIC MURMURS
MORTALITY RATIOS

Age at Issue	Localized		
	Inconstant	Constant	Transmitted
15-29	110	170	325
30-39	101	141	227
40-49	125	134	210
50-64	103	126	152
15-64	111	139	220

Here, then, one finds an incontrovertible trend among the holders of more than 36,000 policies, examined for insurance under the circumstances outlined. Even with the limitations inherent in examinations of this type, it is quite out of the question that these figures can point up erroneous conclusions. The *more prominent the murmur, the more likely it is that it is of organic origin.* The cold mortality facts support the general clinical impression.

How about the effect on mortality of cardiac hypertrophy, as estimated solely on an apex impulse placed lateral to the mid-clavicular line? The inadequate impact of a diagnosis of hypertrophy so established is obvious; it is clear also that histories are notoriously misleading in this connection. *Table* 6 shows the experience with the transmitted apical sys-

tolic murmur when the examining physician has given as his opinion that slight hypertrophy was present. There were relatively few deaths in this category, as compared with those in previous classifications, but there were still over 1,500 policies involved. The adverse trend is clear: the mortality ratio without hypertrophy as so identified was only 220 per cent.

TABLE 6.

APICAL SYSTOLIC MURMURS TRANSMITTED, SLIGHT HYPERTROPHY

Age at Issue	Deaths Actual	Deaths Expected	Mortality Ratio Per Cent
15-29	9	4	221
30-39	29	7	439
40-49	24	10	243
50-64	17	6	278
15-64	79	27	296

Table 7 shows the effect of a history of rheumatic fever. The results are strikingly similar to those noted when there is a definite history of some streptococcal infection, not definitely associated with joint manifestations. In this group were 2400 applicants.

TABLE 7.

APICAL SYSTOLIC MURMURS TRANSMITTED, HISTORY OF RHEUMATIC FEVER

Age at Issue	Deaths Actual	Deaths Expected	Mortality Ratio Per Cent
15-29	25	7	363
30-39	20	9	214
40-49	27	9	285
50-64	9	5	192
15-64	81	30	267

If, then, the transmitted apical systolic murmur is reported in conjunction with a clinical impression of hypertrophy, or if there is a history of rheumatic fever, chorea, or a definite streptococcal infection, there is an even greater likelihood that a significant valvular deformity is present and that a higher mortality is to be expected. In this group, as with the localized murmurs, the cases in which x-ray evidence was available were too few to justify an attempt at statistical analysis.

This discussion is not concerned with those apical or peri-apical murmurs which are so prominent and so placed as to be almost certainly pathognomonic of some congenital malformation. An example of such a murmur would be that associated with an interventricular septal defect. It is possible that a few such cases may have been included in the groups already considered; but, by and large, the location and quality of such murmurs, together with the usually associated histories and secondary diagnostic features, would provide satisfactory differentiation.

BASAL MURMURS

Viewed broadly, basal systolic murmurs are of two types, aortic and pulmonic. By definition, the former include murmurs heard with maximum intensity in the second interspace to the right of the sternum. Aortic diastolic murmurs are often heard best to the left of the sternum in the third interspace or even lower, but this is not commonly the case with aortic systolic murmurs. Pulmonic systolic murmurs are heard with maximum intensity in the second left interspace alongside the sternum. Unless caused by such congenital lesions as patent ductus arteriosus or pure pulmonic stenosis, they are rarely very loud or very widely distributed. It is more important to palpate carefully for a thrill in the presence of a basal systolic murmur than with an apical bruit. This simple diagnostic procedure is more neglected than any other in common usage. No basal murmur should pass observation without painstaking palpatory evaluation. A thrill, conclusively demonstrated, is incompatible with a purely physiologic state.

Turning first to the pulmonic systolic murmur, localized, without radiologic evidence as to heart size, it is found that there is practically a standard mortality among applicants

for insurance presenting only this one physical sign. *Table* 8 summarizes this experience. Clinicians are agreed, for the most part, that it is of no adverse significance, and the statistics support this view. This is in striking contrast to the divergence of impressions which may prevail concerning the apical systolic murmurs.

TABLE 8.

PULMONIC SYSTOLIC MURMURS
LOCALIZED

	Deaths		Mortality Ratio
Age at Issue	Actual	Expected	Per Cent
15-29	30	30	100
30-39	54	42	129
40-49	26	27	97
50-64	8	11	71
15-64	118	110	107

Basal systolic murmurs of maximal intensity in the aortic area are of far greater diagnostic significance. It is unfortunate that the actuarial study did not break this classification down into cases with and without histories of rheumatic fever, for both this etiologic factor and arteriosclerosis are responsible for the lesions concerned. Nevertheless, the notable inadequacy of the history in many instances being admitted, it may be that the conclusions will not suffer unduly.

Another factor is the relatively small number of cases to be presented. It is unusual to find this physical sign as an isolated diagnostic feature. Most individuals with a murmur of this type have other stigmata of cardiovascular involvement and are hence excluded from the actuarial tables. But the total available figures are of interest, even though fewer than 1,000 persons applying for insurance are concerned. *Table* 9 summarizes the related experience. These murmurs are of serious diagnostic importance. If they are widespread, the mortality potentialities are grave. Younger ages are affected as well as those of more mature years. The excess deaths in these categories were predominantly circulatory, to a degree not so convincingly shown in other classifications.

TABLE 9.

AORTIC SYSTOLIC MURMURS
AGE AT ISSUE 15 TO 64

	Not Transmitted	Transmitted Upward
Mortality ratio	191	491
	Per Cent	

COMMENT

STATISTICAL fallacies may pass unnoticed by reason of the awe, suspicion, and reverence with which statistical thinking is likely to be regarded. Here, however, we are dealing with material unquestionably homogeneous in origin. We may return to considerations involving correlation between these impressive facts and the clinical conclusions which have accrued from long practical experience.

In apical systolic murmurs, one is dealing with a relatively uniform location, but with varying quality, intensity, and position in the cardiac cycle. The insurance data rarely take into consideration in convincing manner whether the murmur is heard immediately after the first sound or in mid-systole. The former is more likely to be associated with organic valvular involvement than the latter. The louder and harsher the murmur, the less probable is it that one is dealing with a physiologic state. A comparatively recent survey by White and associates [4] demonstrated that a very substantial mortality occurred in individuals showing a grade 4 to 5 apical systolic murmur. This is borne out by the actuarial figures. The inevitable conclusion is that an apical murmur of considerable intensity, heard over a wide area, especially to the left of the apex, should be viewed with great suspicion; and that all practical special studies should be carried out to make possible the optimum evaluation of the situation and the best possible advice to the patient. The radiologic demonstration of cardiac hypertrophy carries with it grave prognostic overtones, all the worse

4. White, P. D., Schaaf, R. S., Counihan, T. B., and Hall, B.: The Clinical Significance of Apical and Aortic Systolic Heart Murmurs, Am. J. Med. Sci., 225:469 (1953)

if there is a documented history of rheumatic fever. Clinical experience tends to point up a less favorable outlook for the apical systolic murmurs in the upper age groups than do the insurance data. It is not clear why this discrepancy occurs, but it is probable that it is due to the exclusion of many insurance cases by reason of other disqualifying factors.

In basal systolic murmurs, one finds an added diagnostic element: location. In addition, there is the factor of etiology. Is an aortic murmur of rheumatic origin? Or is it a degenerative manifestation? Levine and his associates[5] recently demonstrated the high incidence of a rheumatic etiology in proved cases. Their study suggests that the so-called "pure" cases have a surprisingly favorable expectancy. Here again one finds demonstrated the advantages of the complete diagnostic survey, not available to insurance sources. In the usual course of events, the physician is justified in arriving at a guarded prognosis when he is confronted with a loud aortic systolic murmur. This is maximal in the second interspace to the right of the sternum in a large proportion of cases. But in 10 to 15 per cent, it may be loudest to the left of the sternum or even at the apex. A thrill is directly related to the intensity of the murmur, and palpation should be carefully performed as a diagnostic measure in confirmation of the auscultatory impression. As with the apical murmurs, x-ray and electrocardiographic studies are indispensable to the clinical appraisal, although not always practically available in insurance practice.

It would be unfair to proceed to a summary of these observations without reference to a remarkable article on basal systolic murmurs by Halliday, a distinguished Australian cardiologist and a master of the medical underwriting art.[6] This dealt with 1,000 patients referred to a large cardiac clinic. All age groups were represented. More than 200 basal systolic murmurs were observed. The clinical approach was emphasized—that is, stress was laid on careful evaluation of the nature of the second heart sound, the presence or absence of a thrill, the type of cardiac impulse, and other often-neglected physical signs. Halliday[6] concluded that the innocent basal systolic murmurs could be identified if reasonable diagnostic acumen was exercised, but that organic involvement could be excluded only after most careful scrutiny of all factors of clinical significance and after all possible special studies had been carried out.

SUMMARY

THIS discussion has dealt with a variety of concrete and ephemeral elements having to do with the evaluation of systolic cardiac murmurs. Passing reference has been made to related clinical experience. A small sample of insurance data has been presented.

1. The importance of heart murmurs cannot be underestimated. They should not be overdiagnosed. The most meticulous care must be exercised in the evaluation of all murmurs. We must be ever conscious of the adverse effect of a too-conservative therapeutic regime.

2. In many instances, the presence of a systolic murmur, apical or basal, is of no adverse significance as far as expectancy is concerned.

3. The more intense and widely distributed the murmur, the greater the chance that longevity may be affected. Age, history, and other features of a case may modify the prognosis.

4. The hazard is always there and it is the dedicated duty of the physician to extend every practical diagnostic facility to individuals presenting themselves for an opinion concerning the true cardiac status when only a systolic murmur is present.

5. Mitchell, A. M., Sackett, C. H., Hunzicker, W. J., and Levine, S. A.: The Clinical Features of Aortic Stenosis, Am. Ht. Journ., 48:684 (1954)

6. Halliday, J. H.: Transactions of The Assn. of Life Ins. Med. Dirs. of America, Vol. 38 (1954)

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Papillary Cystadenocarcinoma of a Broad Ligament Cyst*

For the second time in world literature a malignant broad ligament cyst is reported. The Columbus Hospital group here report a case of this exquisitely rare lesion.

Malignancy of a broad ligament cyst is exceedingly rare. Lennox and Meagher [1] reported the only previous case of parovarian carcinoma in 1952. It is our hope that presentation of this case may arouse consideration of the etiology, and possibly, bring to light some cases not previously reported.

A 31-year old nulliparous female, married eight months, was first seen by the senior author in March 1954. She had a mass in the lower abdomen, but no other complaints or symptoms. Despite regular and normal menses, she thought she might be pregnant. She had first noticed this abdominal mass, which had increased in size, about three months previously. Her health was generally good and she had gained about four pounds.

General examination was essentially negative. Blood pressure was 120/70. Examination of abdomen revealed a mass arising from the pelvis to within 1½ inches below the umbilicus. The mass was not movable. It was symmetrical, non-tender, smooth and firm. No pulsations, no movement on inspiration or expiration, and no fetal heart sounds were heard. There was no ascites or edema of the legs.

On vaginal examination the uterus was found anterior to the mass. It was normal in size and shape, and not movable. The cervix was small, firm and moderately eroded.

Pregnancy tests were negative. A flat plate of the abdomen revealed no fetal parts. Urine analysis was negative. Hemoglobin was 82 per cent (14.2 gms.); the erythrocyte sedimentation rate was 8 mm. per hour; and a vaginal smear was negative.

A pre-operative diagnosis of ovarian cyst was made and laparotomy was performed on March 29.

Upon opening the abdomen, the peritoneum was smooth and glistening. No free fluid was found. The uterus was in an anterior position, displaced from the pelvis and normal in size and shape. Both tubes and ovaries were normal and distinctly separate, anatomically, from the mass.

To the right of the uterus, and displacing it to the left, there was a large smooth, tense, cystic mass filling the right iliac fossa and the hollow of the sacrum. The mass was covered by the right broad ligament. Overlying the mass was the appendix and cecum.

The cecum was mobilized. An incision was made through the peritoneum overriding the mass, thus entering the broad ligament. The mass was removed by blunt dissection. Moderate oozing was encountered at the base which was easily controlled.

Re-examination of the adnexae and uterus showed that they were in no way connected with the mass. No induration or palpable nodes were noted.

At the time of operation, the mass was thought to be benign. When the histopathologic diagnosis was made, the patient refused further surgery. She was given radiation therapy.

At present, eight months postoperatively, the pelvis is freely movable and there is no evidence of local or distant metastases.

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1. Lennox, B. and Meagher, M.: Journal of Obstetrics and Gynaecology of the British Empire, 59:783 (July 1952)

Gross Description: The specimen is a soft, ovoid, cystic mass measuring 105 millimeters in diameter. The outer contour of the cyst is smooth and glistening. Capsular blood vessels appear slightly congested. No peritoneal implants are noted. The cyst wall shows irregular thickening and fibrosis with an average thickness of 4 millimeters. The cyst is filled with a muddy brown fluid. The inner lining is studded by numerous papillary masses of soft, friable, grayish-brown tissue. The papillary cores reveal scattered small, soft, pale gray nodules showing small hemorrhagic centers.

Microscopic Description: The chief pathologic process is one of neoplasia consisting of mixed solid and papillary carcinoma. The papillary portion of the tumor is abundant and presents numerous irregular papillary processes composed of thin, congested stromal cores covered by both single and multiple rows of columnar cells possessing rather large irregular hyperchromatic nuclei with moderate mitosis. The cells arise from the lining of the numerous small and large cysts scattered throughout the specimen. The cysts are separated by thin and thick septa of hyalinized connective tissue. The fibrous septa are also infiltrated by small clumps of tumor cells. The solid portion of the tumor shows less cellular differentiation. The cells vary in size and shape and contain large ovoid hyperchromatic nuclei and a moderate amount of pale acidophilic cytoplasm. The cells are arranged in small and large masses surrounded by loose, congested, connective tissue stroma. Tumor permeation of the small lymphatics is noted.

DISCUSSION

THE etiology of this malignant tumor has, because of its rarity, not received adequate discussion. G. G. Bantock [6] (1873), R. Kossman [6] (1894), and J. D. Malcolm [3] (1903) believed that all intraligamentous cysts were of parovarian origin. Which of the vestigial remnants of the parovarium is directly involved, is difficult to ascertain. The embryogenesis of the parovarian remnants is still in doubt. Gardner [2] and his co-workers (1948) and Gilbert and Sheorey [3] (1941), have shown that the

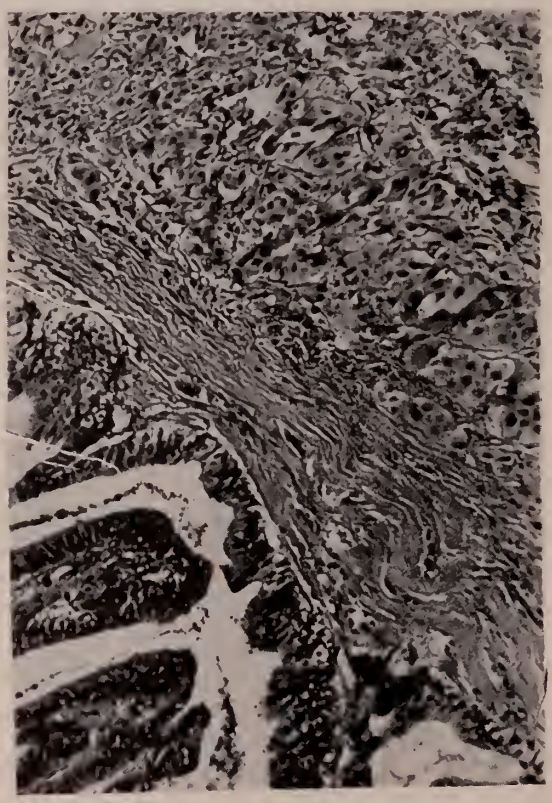

Figure 1. The papillary and the less differentiated solid parts of the tumor.

Figure 2. Adenocarcinoma with transitions from the glandular to the more solid carcinoma.

precise beginning of a parovarian cyst is difficult to determine.

It would seem that the prevailing opinion, that parovarian cysts are innocuous, must be re-evaluated. For example, Nicholson [4] (1923) and Muller [5] (1942) each reported a case of benign papillary cystoma of parovarian origin. Lennox and Meagher [1] (1952), in reporting their case of parovarian carcinoma, stressed the histologic similarity between Nicholson's tumor and their own.

SUMMARY

An intraligamentous cyst was diagnosed pathologically as a papillary cystadenocarcinoma. We have found only one previously reported case of parovarian carcinoma.

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Teen-Age Fatigue

Teen-agers who are often tired and mope around the house may be ill—but are more likely to be quite normal. So says Dr. Edward Wilkes, writing in the November (1954) issue of *Today's Health*.

He thinks that teen-agers do tire easily and that most of the problems can be solved without expert help.

The major reasons for normal fatigue are rapid growth, too little sunshine and outdoor exercise, social and school pressures with overstimulation and difficulty in sleeping, poor diet or overweight, and common teen-age emotional problems.

"Fatigue is natural for many a healthy, fast-growing adolescent," he said. "Moping and apparent indolence may be nature's way of slowing down body movements to withstand the strain of excessive growth. Wise parents will make sure their teen-agers get enough rest."

Teen-agers also need extra protein, and daily diet should include a quart of milk, fish or meat, eggs, a variety of green vegetables and fruit, including citrus fruits, and whole grain or enriched bread or cereal. Breakfast should be generous, even if the teen-ager's fatigue is due to overweight and he is on a diet. Reducing diets should be carefully supervised, since fatigue also may come from dieting fads common among teen agers.

"Many teen-agers tire because they are unhappy or full of worries," he said. "These vague, ill-defined sources of adolescent anxiety" may cause the teen-ager to daydream he is a hero in compensation for lack of confidence and independence.

"In summary, teen-age fatigue may be a normal accompaniment of rapid physical growth, may stem from illness or psychological cause, or may be due to one or more contributing factors," Dr. Wilkes said. "Careful analysis by the physician will usually solve the mystery and provide a clue to the proper remedy."

2. Gardner, G. H., Greene, R. R. and Peckham, B. M.: American Journal of Obstetrics and Gynecology, 55:917 (September 1948)

3. Gilbert, B. and Sheorey, B.: Journal of Obstetrics and Gynaecology of the British Empire, 48:549 (June 1941)

4. Nicholson, G. W.: Guy's Hospital Reports, 73:37 (1923). Also reprinted as chapter 5 Nicholson's *Studies in Tumor Formation*, London, 1925, Butterworth Publishers.

5. Muller, Johannes H.: Zentralblatt fur Gynakologie, 66:1405 (December 1942)

6. Ricci, J. V.: *One Hundred Years of Gynecology*, Philadelphia 1945, Blakiston.

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Cesarean Section at the Mercer Hospital 1949 to 1953

In this careful analysis Dr. Henry reviews the indications for cesarean section at an excellent medium-sized New Jersey hospital. He notices a tendency to perform cesarean sections before trial of labor, he speculates about the 7 per cent of cases where sterilization was given as the primary reason, and he suggests a special consultants' committee or other reviewing tribunal to authorize such operations.

A CESAREAN section rate of about 4 per cent is regarded as commensurate with good obstetrical management. Anything higher demands some explanation. However, the rate seems to be rising because antibiotics and better anesthesia have increased the safety of the procedure. Because of these factors, the reverse might be true and permit an increased delay in operation and in some cases, allow the obstetrician to avoid it entirely.

The material presented here is from a survey of cesarean sections done at the Mercer Hospital (Trenton) from January 1, 1949 to December 31, 1953, a five year period. Table 1 shows the general incidence of births and maternal deaths during that period. There were 11,376 patients delivered of whom 306 were delivered *via* the abdominal route. Seven mothers died, a maternal death rate of 0.06 per cent. Of these, one was a cesarean section mortality for a rate of 0.32 per cent. Since 1950 there has been a steady and notable increase in the number of cesarean sections.

The one maternal death occurred as follows:

A 19-year old married woman was admitted to the Mercer Hospital at 11 p.m., September 4, 1949. She was in her eighth month. An earlier pregnancy had been successfully terminated by cesarean section 2 years earlier. She had been seen by her physician, at home, on September 4 at 10 p.m. She was then nauseated and complaining of back and epigastric pain. Mild, irregular contractions had begun at 6:30 p.m. On admission to the hospital a consultant was notified. Her blood pressure was 80/40; pulse 116; respiration 40; temper-

TABLE 1. BIRTHS AND MATERNAL DEATHS

	1949	1950	1951	1952	1953	Total
Total Patients Delivered	2018	2107	2313	2430	2508	11,376
Total Live Births	1914	2046	2246	2344	2409	10,959
Total Maternal Deaths	2	1	1	0	3	7 or 0.06%
Total Vaginal Deliveries	1976	2064	2249	2358	2423	11,066
Total Cesarean Sections	42	43	64	72	85	306
Cesarean Section Mortality	1	0	0	0	0	1 or 0.32%

ature 97.4. She continued to complain of back and epigastric pain. She was given sedation and blood was made available. Pelvic examination revealed the cervix to be closed, no presenting part could be palpated. True labor was thought to have begun about 1 a.m. on September 5. At this time she was having regular contractions. She continued to complain of back and epigastric distress and her general condition was worsened. Whole blood transfusion was started and she was prepared for an abdominal operation. At 4:10 a.m., five hours after admission, under cyclopropane anesthesia, she was operated on and free blood was found in the abdominal cavity. The old classical scar had completely ruptured and the fetus was in the abdominal cavity, stillborn. Immediate hysterectomy was performed. Following the operation, the patient continued to fail and was pronounced dead at 9:30 a.m. ($10^{1}/_{2}$ hours after admission). She had received a total of 2500 cubic centimeters of whole blood together with other supportive measures.

TABLE 2. ANNUAL INCIDENCE OF CESAREAN SECTIONS

Year	Deliveries	Cesareans	Ratio
1949	2019	42	2.1%
1950	2107	43	2.0%
1951	2313	64	2.8%
1952	2430	72	3.0%
1953	2508	85	3.4%
	11,376	306	2.6%

Table 2 displays the incidence of cesarean sections at the Mercer Hospital in Trenton for the years indicated. Average over the period was a rate of 2.6 per cent. This is a small general hospital, where most deliveries are of "private" rather than "service" or "ward" patients. This ratio (2.6 per cent) would seem to be a respectable average. One wonders whether we have lost babies through the vaginal route who might have been saved by cesarean section.

TABLE 3. TYPE OF SECTION

	Low Segment		Low Classical	
Year	Number	Per cent	Number	Per cent
1949*	12	28	29	72
1950*	8	19	34	81
1951	35	55	29	45
1952	45	63	27	37
1953	50	59	35	41

*In 1949 there was one cervical hysterectomy and in 1950 one extraperitoneal section.

Table 3 reflects the type of operation. In 1951 the low segment approach became popular and in that year, and in every year thereafter, has been the most common method. The ratio of cesareans done by the classical method has conspicuously diminished. Only one extraperitoneal section was done in the period. This is chiefly because patients are sectioned before the indication for this type of procedure arises. And, of course, not many obstetricians are thoroughly trained in extraperitoneal section technics.

TABLE 4. ANESTHESIA

	Spinal	General	Local
1949	17	25	0
1950	21	22	0
1951	38	25	1
1952	50	22	0
1953	54	31	0
Totals	180	125	1

TABLE 5. AGE

	20 or younger	21 to 25	26 to 30	31 to 35	36 to 40	41 or older
1949	2	13	8	12	5	2
1950	0	9	14	14	6	0
1951	2	9	21	22	7	3
1952	8	11	22	18	11	2
1953	4	21	29	17	13	1
Totals	16	63	94	83	42	8

TABLE 6. PARITY OF MOTHERS
(Cesarean Sections)

	O	I	II	III	IV	V	VI	VII or over
1949	20	12	6	3	0	0	0	1
1950	9	18	13	2	1	0	0	0
1951	24	20	14	2	1	0	1	2
1952	33	25	10	3	0	0	1	0
1953	34	31	9	7	3	1	0	0
Totals	120	106	52	17	5	1	2	3

TABLE 7. DURATION OF LABOR PRIOR TO SECTION

Hours	0	1-12	13-24	25-48	49-72	Total
1949	34	6	1	1	0	42
1950	38	4	1	0	0	43
1951	49	9	2	4	0	64
1952	52	8	8	4	0	72
1953	58	9	7	9	2	85
Total	231	36	19	18	2	306
Ratio	75%	11%	7%	6%	—	

Table 7. It amazed me to note that three quarters of these patients had had no labor. It seems to me that the number delivered abdominally without trial of labor is inordinately high. This is true even after allowances are made for those with toxemias, hemorrhages and previous cesarean records. It would seem to me that there ought to be a consultant committee or some other agency established to concur in indications for cesarean section.

Table 8. Note that almost 80 per cent of the patients had intact membranes at the time of operation. The comments under Table 7 above apply here too.

Table 9 lists primary indications only. Secondary indications (in multiple factor cases) have escaped indexing here. The leading stated indications were: previous cesarean, feto-pelvic disproportion, toxemia and hemorrhage. Not all diagnoses of feto-pelvic disproportion were substantiated by subsequent review. I think the 11 per cent rate for toxemia is high. It seems to me that more vigorous medical management of the toxemia would have allowed vaginal delivery in many of the cases. The "hemorrhage" line includes many cases of mild or moderate vaginal bleeding. Perhaps as more studies

TABLE 8. DURATION OF RUPTURED MEMBRANES PRIOR TO SECTION

Year	Undetermined	Unruptured	under 12 hrs.	13 to 24 hrs.	25 to 48 hrs.	49 to 72 hrs.	73+ hrs.
1949	2	36	2	1	0	0	1
1950	1	38	3	0	0	1	0
1951	0	52	3	5	3	0	1
1952	0	55	11	4	1	1	0
1953	0	62	13	3	5	1	1
Totals	3	243	32	13	9	3	3

TABLE 9. PRIMARY INDICATIONS FOR CESAREAN SECTION

	1949	1950	1951	1952	1953	Total
Previous Cesarean Section	12	25	18	27	32	114 or 37.2%
Feto-pelvic Disproportion	9	5	16	23	25	78 or 25.4%
Toxemia	6	4	6	6	12	34 or 11.1%
Hemorrhage	8	2	8	6	9	33 or 10.7%
Sterilization	5	6	6	2	3	22 or 7.2%
Malpresentations	0	0	5	1	1	7
Primip. Breech or Twins	1	1	1	2	1	6
Inertia (alone)	1	0	0	1	1	3
Miscellaneous						
a. Rh Factor			1			1
b. Large Varicosities				1		1
c. Prolapsed Cord					1	1
d. Diabetes				2		2
e. Elderly Primipara			3			3
f. History of meningeal hemorrhage				1		1

Supplementary Operative Procedures — Not Primary Indication for Cesarean Section.

Salpingectomy (including tubal ligation)—61—20%

of this are made, as more facilities become available, our ideas may change. Note that 7.2 per cent of these operations were primarily sterilizing procedures and were so intended. I have not seen so high a ratio in the records usually summarized in the obstetrical literature. Here, too, the need for a consultant committee is manifest.

TABLE 10. COMPLICATIONS

1.	Puerperal Morbidity	
	a. Puerperal Infection	33
	b. Other Infection	2
2.	Non-infectious	
	a. R. H. D.	2
	b. Diabetes	3
	c. Bleeding	35
	d. Shock	1
3.	Other Complications	
	a. Toxemia	47
	b. Primary Uterine Inertia	6
	c. Thrombophlebitis	3
	d. Varicose Veins	1
	e. Fibromyomata	7
	f. Eclampsia	3
	g. Pulmonary Tbc	1
	h. Vaginal or Cervical Stenosis	2
	i. Peripheral Radiculoneuritis	1
	j. Previous Vulvectomy	1

4. Incidence of certain complications: Ruptured uterus subsequent to a previous cesarean section occurred in 0.65 per cent. Toxemia in 15.4, puerperal infection in 11, eclampsia in 1 per cent and bleeding in 11 per cent.

TABLE 12. CESAREAN SECTION INCIDENCE AND MORTALITY

Hospital	% Incidence	% Mortality
1. Good Samaritan, Los Angeles	9.7	—
2. Millard Fillmore, Buffalo	8.16	0.22
3. Kansas City Hospitals	7.1	—
4. University of Pennsylvania	7.0	0.35
5. Cleveland Maternity	6.1	0.62
6. Jewish of Brooklyn	5.5	0.66
7. Margaret Hague, Jersey City	4.0	0.17
8. Chicago Lying-In	4.3	0.32
9. Boston Lying-In	3.5	0.57
10. Mercer Hospital, Trenton	2.6	0.32
11. Crawford Long, Atlanta	2.09	0.18
12. Jefferson Davis, Houston	1.03	0.87

In each of these 12 references, the period covered was 5 or more years.

TABLE 13. STAFF

No cesarean sections in this period were done by general surgeons. The doctors performing these operations were:

	Operations	Ratio
Board-certified at time of operation	73	24%
Board-certified subsequent to operation	3	1%
Practice limited to obstetrics but not certified	213	69%
General practitioners, under supervision	17	6%
	306	100%

TABLE 11. FETAL MORTALITY, GROSS

Year	Total Births	Vaginal Deliveries			Cesarean Section		
		Total	F. M.	%	Total	F. M.	%
1949	2018	1976	99	5.01	42	5	11.9
1950	2107	2064	58	2.81	43	3	6.97
1951	2313	2249	66	2.93	64	1	1.56
1952	2430	2358	79	3.35	72	7	9.72
1953	2508	2423	90	3.71	85	9	10.58
Totals	11,376	11,070	392	3.56%	306	25	6.15%

SUMMARY

THIS paper is a critical analysis of the handling of certain obstetrical problems *via* cesarean section at the Mercer Hospital in Trenton. This is the first time such an analysis has been undertaken at this hospital. It is hoped that we all will profit by the presentation. The facts, in brief, are:

1. Total patients delivered during the five year period (ending December 31, 1953) was 11,376.

2. Total patients subjected to cesarean section was 306 or a cesarean section rate of 2.6 per cent.

3. Cesarean section mortality amounted to

0.32 per cent. This is commensurate with the rate in many large, well run obstetrical units.

4. Gross, uncorrected fetal mortality in cesarean section patients averaged 6.15 per cent.

5. The diagnosis of feto-pelvic disproportion was not always supported by evidence available from the record.

6. Toxemia patients were not always given the benefit of vigorous anti-toxemia regimes prior to section.

7. A review of attitudes seems in order since 7 per cent of the primary indications for cesarean section were listed as "sterilization."

8. Seventy-five per cent of the patients were not given benefit of labor prior to section. Excluding those patients who were sectioned because of hemorrhage, toxemia, and elective repeat sections, there remain 41 per cent of the patients who were sectioned without benefit of a trial of labor.

9. Plea is made for the formation of an active, authoritative consultant service.

341 Bellevue Avenue

Sense of Project

Perhaps the most distinctive characteristic of our country is what I like to call "a sense of project." Perhaps we Americans have this special "sense of project" because we ourselves always were a project. The Mayflower was a project before it left England, and Massachusetts became a project when the Mayflower set sail for home. Individual Americans have projects and when they become too big for them, they join forces to cope with the bigger project.

The second word that goes along with the word "Project" is "Invention." A land teeming with a sense of project was bound to be a land teeming with invention. This invention, this urge toward fraternal expression of constructive activity is almost uniquely American.

Some have professed to detect a paradox in the in-bred American passion for independence. But here is no contradiction. For it is only the free who can voluntarily commit that freedom to the cause of the greater good. In no other part of the world have men come together in such numbers and organized themselves in voluntary concord to achieve their goals. Certainly no other part of the world has seen the scope and success of such organization.

The Community Chest and United Fund idea was born of necessity and logic. It was born out of the chaotic multiplicity of charitable causes, out of an obvious need for unity. The Community Chest movement is our invention to make attainable one of America's projects. It is the American way to examine the needs of the particular community, to fix budgets and quotas, to scrutinize and screen projects, and to coordinate the whole at the community level, under community leadership, to collect community moneys to be spent for community ends. What could be more orderly, more logical—and more American?

(James A. Linen)

Nathan Frank, M.D.

Jersey City

Myxedema Heart Disease

Report of a Case With Aortic Dissection and Survival

Here reported is an almost unique combination of myxedema heart disease and dissection of the aorta. Even more extraordinary is the fact that the patient survived.

Heart disease due to hypothyroidism is a rare cardiac disability. Probably the reason it is so seldom reported is that it does not give the usual symptoms of impaired cardiac function (exertional dyspnea, orthopnea, cough and pedal edema) which are obscured by the other systemic manifestations by hypometabolism. Myxedema usually occurs spontaneously, but may follow thyroid surgery. It occurs usually in middle age, but may be found in youth and childhood. Treatment is usually gratifying. Replacement therapy brings about a complete disappearance of symptoms in most cases. Occasionally, thyroid therapy will precipitate an anginal syndrome. This occurs in patients whose hearts have an impaired coronary blood flow which cannot meet the increased work demands.

Until recent years, dissecting aneurysm of the aorta was a postmortem surprise, but now it is occasionally recognized clinically.[1-4] It is usually fatal in a few minutes or a few days. There are reports of patients having survived this catastrophe for a few years. It occurs as a result of cystic necrosis of the media of the aorta. The exact mechanism for this degenerative change in the media is not established. Recent studies[5] implicate thrombosis of the vasa vasorum that supply this part of the aortic wall. The underlying disease of the vasa vasorum is atherosclerosis. The weakness of the media allows the intima to be excessively subjected to intra-aortic pressure, which is followed by its laceration with resulting passage of the aortic blood column into the vessel wall. This, in turn ruptures with extravasation of blood into the pericardium, pleural cavities, abdomen and kidney. Patients with myxedema of long standing develop extensive atherosclerosis. Recently, Blumgart[3] and co-workers have contested this point. I do not feel their evidence is convincing since all their patients had artificial hypothyroidism secondary to thyroid surgery.

I here describe an unusual case in which two rare forms of heart disease were present. This case shows that these conditions can be diagnosed antemortem. It also illustrates that, with proper therapy, the patient may survive.

A 57-year old woman was admitted to the Jersey City Medical Center on December 15, 1950 on the service of Dr. Marshall Bergen. She was admitted for a fracture of her left patella. Because she had an anemia, medical consultation was requested. I examined her on December 21, 1950. My note is as follows:

"The obese, well developed, white woman offers no complaints. She has a waxy pallor. Skin is very dry. The scalp hair is dry and brittle. Axillary hair is absent. Pubic hair is very scant. There is some loss of the lateral portions of the eyebrows. Mucous membranes are pale. There are large areas of ecchymosis over the anterior aspect of the left

forearm and right leg. No petechiae or purpuric lesions are seen. There is no evidence or history of chronic blood loss. Patient has been losing hair. She tolerates cold weather poorly.

Pertinent physical findings are: (1) Obesity. (2) Enlargement of the heart to the right and left. (3) Muffled heart sounds. (4) Blood pressure 118/86. (5) Pulse rate—70 regular, fair quality.

Significant laboratory findings were:

R.B.C.—3,500,000	W.B.C.—10,750
Hemoglobin—10.5g	Platelets—204,000
Hematocrit—32	Polys—75
MCV—91	Eosinophiles—1
MC Hb—30	Basophiles—1
Reticulocytes—1.3%	Lymphs—22
	Monos—1

B.M.R.: Minus 30 per cent.

Serum proteins—total 6.8

(albumin—3.18%; globulin 3.62%; A/G ratio—1:1.4)

Serum bilirubin—0.1.

Cholesterol—507

Cholesterol esters—309

Serology negative.

Casual urine showed 2 plus protein with some pus cells.

N.P.N. 41.

Blood sugar—84.

Chest roentgenogram showed moderate cardiac enlargement both to the right and left.

Electrocardiogram showed low voltage and inverted or isoelectric T waves in all leads. These are the typical changes in myxedema heart.

These findings established a diagnosis of hypothyroidism and hypothyroid heart disease. She was placed on 15 milligrams of thyroid extract daily. She took the medication haphazardly during the interval up to her second hospital admission. This occurred on May 18, 1953. Three weeks previously she had developed severe substernal pain associated with profuse diaphoresis and a feeling of impending death. I saw her the next day. The pain was still present but to a lesser degree, and at this time, it was referred to the epigastrium. There was no radiation to the arms, neck, jaw, back, flanks or legs. Electrocardiogram then was not significantly different from the tracing done in 1950. The pulse was 94, regular and of low amplitude. Blood pressure was 90/60. Fluoroscopy revealed moderate enlargement to the right and left. Immediate hospitalization was advised but refused. Three weeks later, she reappeared and requested to be hospitalized because "I cannot stand the pain any longer." Examination at this time revealed the following significant changes from the findings three weeks previously:

1. The heart sounds were completely inaudible.
2. Fluoroscopy revealed a tremendous increase in the size of the cardiac silhouette. No visible pulsations of the cardiac mass could be definitely observed.
3. Absence of signs of congestive heart failure such as neck vein distention, pulmonary congestion, pedal edema or hepatomegaly.

In the hospital she was placed on strict bed rest and given analgesics for relief of pain. No other medication was prescribed. Serial electrocardiograms failed to reveal changes indicative of myocardial infarction. In view of the negative electrocardiograms and the sudden increase in the size of the heart without evidence of congestive failure, it was felt that dissection of the aorta into the pericardium had taken place. On May 22, 1953, pericardial paracentesis was done. Without the slightest difficulty the syringe filled with pure blood when the needle entered the pericardial sack. Ten cubic centimeters were removed. The next day, she felt more comfortable. Other than the persistent complaint of fullness in the right upper quadrant of the abdomen, the patient did remarkably well. Eleven days after admission, the heart sounds could be heard for the first time. On June 13, 1953, another pericardial tap was done and 10 cubic centimeters of unclotted blood were removed without difficulty. She was discharged on July 2, 1953, much improved. She is still alive at the time of this writing. She manages to do her housework and descends once daily from her fifth floor apartment. She is being maintained on 30 milligrams of thyroid extract daily. Her heart has diminished somewhat in size but is still greatly enlarged. Her last electrocardiogram is within normal limits.

Dissecting aneurysm is rare, but it occurs more frequently than one would surmise from the statistics. The diagnosis is infrequently made before death, but can be recognized more often, if an awareness of its possibility is present. There are practical aspects to this problem, since it is most frequently confused with coronary occlusion and abdominal catastrophies. Today, with the almost universal administration of anticoagulants, one can appreciate the urgent need to differentiate this condition from myocardial infarction. Then, too, with the rapid strides being made in the field of cardiovascular surgery, this disease may soon be amenable to surgical treatment. It should be kept in mind in any case where the following signs and symptoms are noted: (1) Tearing chest pain with radiation to the neck, arms, back, legs or flanks. (2) Sudden obliteration of one or more pulses. (3) The sudden appearance of the aortic diastolic murmur.[6] This sign is found in about 20 per cent of the cases. (4) Pulsation of the right sternoclavicular joint.[7] (5) Flaccid paraplegia of the lower extremities with bladder and bowel dysfunction indicative of spinal cord injury through involvement of the intercostal and lumbar arteries. (6) Upper abdominal pain. As in the above case, it is due to dissection of the pressure column into the arteries of the celiac axis and mesentery. (7) Hematuria. (8) Roentgen

findings [8] of progressive widening of the aortic shadow, and diminished or absent aortic pulsation.

Treatment is expectant and symptomatic. Complete bed rest is important, and should be observed for at least six weeks. Other than sedation, no definitive drug therapy is warranted. Anticoagulants are contraindicated, as are hypotensive agents when hypertension is present.

SUMMARY

1. An unusual case of myxedema heart disease complicated by dissection of the aorta is presented. The patient survived, and is alive at the time of this writing (18 months).

2. The diagnosis and treatment of dissecting aneurysm is discussed.

3. A plea is made for its more frequent antemortem recognition.

180 Bowers Street

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Mailing Blood Specimens

During the summer, blood specimens mailed to the State Laboratory for serologic tests are subjected to hazards of high temperature and contamination. To avoid the embarrassment and delay incident to collecting repeated blood specimens, physicians are asked to: (1) Mail specimens as early in the week as possible, so that there will be no weekend or holiday "layovers"; (2) keep specimens in refrigerator until they are mailed and (3) take specimens with sterile dry needle and syringe to avoid contamination and hemolysis. These directions are always applicable, but especially during the summer.

Salt in Your Diet

A 22-page, interesting brochure on the physiology of salt is available gratis from the Salt Institute, 221 La Salle Avenue, Chicago 1, Illinois.

WILLIAM B. NEVIUS, M.D.

East Orange

The Common Cold From the Viewpoint of the Pediatrician*

In the controversy about the use of antibiotics in the common cold, Dr. Nevius places himself squarely in the pro-antibiotic school and spells out his reasons.

ABOUT 40 per cent of the private practice of pediatrics is devoted to the prevention and management of the common cold, so important is this problem in our day-to-day work. Prompt institution of simple measures after early recognition of a cold will help to keep the illness mild and shorten its duration, as well as lessen the possibility that others in the family will contract it.

The child with the common cold should be isolated. This is difficult where large families live in crowded quarters. Even in more favored families, this step is frequently neglected. If the child who is "coming down" with an infection is kept in his own room, the chances of spread are greatly lessened.

Observance of certain basic principles can also lessen the possibility of infection. I have in mind such matters as suitable clothing, proper diet, vitamin supplements, the temperature of the bedroom at night, and the weather outside when the child goes outdoors. It is common to see young school boys going to school wearing only a jacket over their regular clothes. Their heads are bare, their hands blue with cold, and they are hunched over in a fruitless effort to avoid the cold. If they were suitably clothed with hats, gloves, and a warm coat, their chances of picking up a respiratory infection would be much diminished.

Many children eat too starchy a diet. A diet relatively high in protein and low in carbohydrates with a daily ration of vitamins appears to have increased resistance to cold infection. I recommend the average daily dose of vitamins. But I cannot agree with parents who believe that doubling or tripling the vitamin dosage will double or triple the child's resistance to colds. Some children get colds because they sleep in rooms where the temperature is too low. Their air passages are irritated by the cold air and if they get uncovered are likely to become chilled. *Cold air is frequently confused with fresh air.* Cool, fresh air in the bedroom at night at a temperature of 55 to 60 degrees is satisfactory. Some children are allowed to play outdoors too long when it is very cold or very windy. If they have a slight rhinitis or are just getting over a recent infection, temperatures below 20 or 25 degrees plus a strong wind are likely to irritate their membranes and turn a mild infection into a severe one. Some children are not

*Read before the Section on Otolaryngology, 189th Annual Meeting of The Medical Society of New Jersey, April 18, 1955.

allowed sufficient time to recover from an acute respiratory infection. Their temperatures may be normal for only 24 hours before their parents return them to school. The pharynx and the tonsils and the nasal mucosa are still reddened and inflamed at this stage and unless this redness and inflammation are allowed to subside more completely their chances of having a relapse are considerable. It takes a minimum of five days and frequently a week before this inflammation disappears.

Mild anemia usually due to repeated infection or an improper diet results in a lowering of resistance to cold infections. It is a simple matter to check hemoglobins or red blood cell counts. If they are below normal, prescribe a suitable iron medication and advise as to the proper diet.

A CONDITION that is present more commonly than many doctors realize as a complication of cold infections is that of sinus infection. Sinusitis should be suspected where cold infections persist an unusually long time in spite of good treatment, or where, after an infection has cleared up, there is only a brief interval before the child suffers from another infection. A high index of suspicion aids in the recognition of this condition. Transillumination of the sinuses and x-ray examination are both useful. The aid of an otolaryngologist is invaluable in clearing up of these infections. Ordinary medical management will clear up only a small proportion of sinus infections. The majority need the care and attention of a nose and throat specialist.

In properly selected cases, the removal of diseased tonsils and adenoids contributes to the prevention of, or, at least, to the lessening of the frequency of these infections. Where tonsils are enlarged and have been the site of repeated infection and there is enlargement of the cervical lymph nodes, tonsillectomy certainly seems indicated. In our community adenoidectomy is almost invariably done at the same time as tonsillectomy. The symptoms of nasal obstruction with mouth breathing and the adenoid facies are well-known.

If the parents decline tonsillectomy, vaccine therapy is worth a trial. There are definite benefits to be gained from vaccine therapy in case of infectious bronchial asthma, where the basic underlying cause of the condition is the frequent occurrence of colds. Within reasonable limits, the degree of improvement in infectious asthma is proportionate to the amount of vaccine therapy. Essentially the same degree of improvement in the patient with frequent upper respiratory infections can be obtained with cold vaccine treatments as is generally achieved in asthma.

The last form of prevention that I wish to mention is the use of daily prophylaxis with a sulfonamide or other antibiotic drug. Recurrences of attacks of rheumatic fever are much reduced by the daily administration of some antibiotic such as sulfadiazine or penicillin. It seems to me entirely warranted in the case of children who are sick so frequently that they are more out of school than in it, to offer them the same type of prophylaxis. I have done this, usually with satisfactory results, using one-half a sulfadiazine tablet twice a day, a 200,000 unit tablet of penicillin, or a 100 milligram capsule of Aureomycin® or Terramycin®.

MANAGEMENT OF THE COMMON COLD

I AM sure that there will be little disagreement with the basic principles of the treatment of the common cold: remaining indoors, getting extra rest, preferably in bed if there is any fever, a diet lighter than usual with extra fluids, and an appropriate dose of aspirin if there is fever. From this point on, however, there is much divergence of opinion. At present, the controversy turns on whether to use antibiotics. I prescribe antibiotics quite freely. My reasons are: (1) Antibiotics are easily available; (2) in general, the public wants them. They have heard of the rapid cures from antibiotics. When their children get sick they would like them to have antibiotics. Some doctors who oppose this trend, are subjected to criticism when their patients do not recover as quickly as the neighbor's child who has been

given the latest "miracle drug." (3) There is a wide choice of antibiotics which come in a number of pleasing preparations. (4) In children they are generally well tolerated and from my conversations with doctors who care for an older age group, the incidence of unpleasant side reactions is very much less than it is among geriatric patients. In pediatrics, the ratio of intolerance is very low. There appears to be very little trouble in administering these new medications and they are retained well. One great advantage of the mycins, that I explain to parents, is that there are no hidden harmful effects. Sulfa drugs occasionally cause a lowering of the red blood count or difficulties of excretion through the kidneys. The unpleasant side effects of the mycins are generally very obvious to the observant mother since they usually take the form of nausea, diarrhea or a rash. (5) The greatest argument for their use seems to me to be the prompt improvement of the patient. If the appropriate dose is given, in most cases, an elevated temperature will return to normal or nearly normal in from 24 to 36 hours, much to the satisfaction of the parent and the benefit of the child.

AMONG the disadvantages should be mentioned, the cost of the antibiotics, especially when a child is sick frequently or when there are several children in the family. The average charge is about $4 for a one ounce vial of the oral suspension of the various mycins. Incidentally, sulfadiazine is still a very effective drug and probably the least expensive. It is also true that there are certain side effects to these medications. But what drug is there that has no side effects? Phenobarbital will sometimes stimulate instead of sedate. Morphine will also stimulate sometimes instead of narcotize. Digitalis may cause vomiting and yellow vision. Yet no one criticizes their use in the proper case. The most potentially dangerous drug at the present time appears to be penicillin when it results in an acute anaphylactic reaction. This is, however, *extremely rare,* and I venture to say that most of you present have not experienced such a reaction. The possibility of such a reaction can be materially lessened by simultaneously injecting an antihistamine drug, such as 10 milligrams of Chlor-trimeton®, and by keeping the patient under observation for several minutes before allowing him to leave the office. It has been stated that an increase in the occurrence of resistant organisms is an argument against using antibiotics too freely. While this thesis cannot be brushed aside, it has been my observation that during the epidemic of the winter of 1954-55, extremely few cases failed to respond. The point is also made that a patient who is given antibiotics frequently for minor illnesses will not respond to treatment when he acquires a really severe illness. Yet, the number of patients in our pediatric wards is very much lower since the general use of the antibiotics. In fact, it is sometimes difficult to find enough cases for teaching our interns. The lessened incidence of some of our more severe infections such as septicemia, lobar pneumonia, mastoiditis, and empyema is very striking. My point is that the really severe infections are becoming quite rare. They have been prevented by the widespread use of the antibiotics.

SPECIAL SITUATIONS

IN CERTAIN special situations in pediatrics, antibiotics are particularly useful and fully warranted. I have in mind, for instance, acute otitis media and acute laryngotracheitis. The tendency of otitis media to make its presence known in the early hours of the night is common knowledge. This leads to considerable loss of sleep to the child and his parents. If a child is given an antibiotic shortly after he begins to complains of earache, particularly an injection of aqueous procaine penicillin, his pain will disappear in a few hours and he will spend a much more comfortable night, his parents will get more rest and the whole train of unpleasant consequences of an acute otitis media can be avoided. Acute laryngotracheitis is a potentially serious disease. In a few hours a comparatively mild "croup" can turn into a severe respiratory embarrassment.

Here too, the early use of an oral antibiotic and/or an injection of aqueous procaine penicillin will usually prevent serious consequences.

Early use of an antibiotic is also warranted in the small infant who has had a series of upper respiratory infections close together. I am thinking for instance of the infant who got his first infection at three to four weeks of age and had approximately one a month for four or five months. When the parent reports by telephone, after four or five such attacks, that the child's nose is congested and that he is beginning to cough again, one can imagine what such symptoms may lead to and one can appreciate the urgency of the situation to the parent. An appropriate dose of an antibiotic at this stage will usually dissipate the symptoms in a day or two. If there is a frail child in the family or one who has been recently ill and a sibling comes down with a cold, it seems to me entirely justified to treat not only the patient, but also to give his frail brother or sister a suitable preventive dose. It is not uncommon for respiratory infections to be passed back and forth from sibling to sibling or from child to parent and back to the child again. In this case it seems to me wise to treat both the parent and the child *simultaneously* so they will both get well at the same time and hence make it unlikely that they will pass an infection back and forth. It is not uncommon for a child to come down with a cold before some very special occasion like a birthday party, a Christmas or a vacation trip. Rather than spoil the occasion for the child and his parents it seems to me very simple and worthwhile to prescribe an antibiotic, let the child get well, and enjoy his special event. Not infrequently a parent will complain that the child has had a nasal discharge and cough which has hung on for two or three weeks without apparently clearing up, and they would like something effective to accomplish this result. An antibiotic will usually do the trick.

THERE is one situation where I feel the use of an antibiotic by injection is particularly indicated. Formerly only penicillin was available but now there are two other intramuscular preparations. I have in mind the control of disturbances of the gastro-intestinal tract where the underlying cause apparently is a "cold" infection. This is my concept of what we mean when we refer to "the virus." If no antibiotic is given, the underlying "cold" infection will smolder along and delay recovery from the vomiting and diarrhea. Since oral medication is often poorly tolerated in such situations, an injection or two of penicillin or other antibiotic will usually result in prompt improvement. I consider this a most valuable use of these modern additions to our armamentarium.

572 Park Avenue

Vitamin E Bibliography

Eastern Kodak Company has recently released a paper-bound listing of almost a thousand references in the recent literature to vitamin E. There is a brief abstract of each article so that the volume as a whole is a monograph on the subject. The bibliography sells for $3.00. Copies may be obtained from the National Vitamin Foundation, 15 East 58th Street, New York 22, N. Y.

Reuben Yontef, M.D.

Bayonne

Topical Use of Sodium Sulfacetamide in Selected Dermatoses

A sodium sulfacetamide lotion gave excellent results in seborrhea and other dermatoses according to this study by Dr. Yontef.

Sodium sulfacetamide has been widely used topically for the treatment of infections of the eye because of its effectiveness and the rarity of sensitivity reactions.[1-10] Recently, Duemling[12] described favorable results with the topical use of this compound in seborrheic dermatitis and other dermatoses. His report has stimulated further exploration of the value of sodium sulfacetamide in the management of seborrheic dermatoses both with and without superimposed bacterial infection. Accordingly, a cream-type lotion* containing 100 milligrams of sodium sulfacetamide in each gram was carefully evaluated in several groups of patients as follows:

Group 1 Seborrheic dermatitis—20 patients (Presence of erythema required)

Group 2 Seborrhea sicca—40 patients

Group 3 Other dermatoses—15 patients

Patients were instructed to apply the lotion* to affected areas and to massage thoroughly. With moderate or severe involvement, applications were made twice daily for one week and, after control had been obtained, once daily usually at bedtime. The frequency of application was thereafter reduced to once or twice weekly, or once every two weeks, depending upon the response. If the hair and scalp were oily and greasy or contained debris, a shampoo was advised prior to application of the lotion to insure intimate contact of the medication with affected scalp. To prevent tackiness, patients were instructed to brush their hair for two or three minutes after each application. Patients with eruptions on the glabrous skin were advised to use small amounts of the lotion twice daily until control was gained, and then once daily or every other day.

Sodium sulfacetamide lotion* was continued for several weeks beyond either control or cure in an effort to prevent recurrences. Results were judged on the basis of symptomatic and clinical improvement. Those with seborrheic dermatitis were judged wholly on clinical improvement. All patients were asked (1) whether their scalps had become drier or oilier, or were not affected (2) whether itching had diminished, and (3) whether flakes on the shoulders were present to a greater, lesser or the same degree.

Seborrheic dermatitis in all 20 patients showed improvement. The condition was severe in 3 patients and was completely cleared.

*Sebizon® Lotion 10% was supplied by the Division of Clinical Research, Schering Corporation, Bloomfield, New Jersey.

Among 12 patients with moderate seborrheic dermatitis, the condition was cleared by treatment in 7 and improved in 5. Of the 5 patients with mild seborrheic dermatitis, the dermatitis was cleared in 4 and improved in one. One patient who was completely clear for three months, and who had not applied the lotion* for several weeks, experienced a flare. This was brought under control by reapplication of the lotion for four days. Three patients with moderate seborrheic dermatitis had a recurrence which subsided within four to seven days when the lotion was again applied twice daily. These results are shown in Table 1.

TABLE 1.

SEBORRHEIC DERMATITIS (with Erythema)

	Number of Patients	Completely Cleared	Improved	Unimproved
Severe	3	3	0	0
Moderate	12	7	5	0
Mild	5	4	1	0
Total	20	14	6	0

Among the 40 patients with seborrhea sicca, only 3 failed to improve. Severe in 4 patients, their condition was improved as evidenced by less scaliness and fewer flakes on their clothing but was not completely cleared. Itching of the scalp diminished rapidly. Of the 18 instances of moderately severe seborrhea sicca, 7 were cleared, 10 improved, and one unimproved. Among 18 patients in whom the condition was mild, it was cleared in 4, improved in 12, and unimproved in two.

TABLE 2.

SEBORRHEA SICCA

	Number of Patients	Completely Cleared	Improved	Unimproved
Severe	4	0	4	0
Moderate	18	7	10	1
Mild	18	4	12	2
Total	40	11	26	3

In the other dermatoses, those with elements of pyoderma improved to the extent of clearing of the secondary infection or primary pyoderma. This group included the following conditions: psoriasis, 7 patients unimproved; nummular eczema, one patient unimproved; pyoderma, 2 patients completely cleared; stasis dermatitis with secondary pyoderma, one patient, secondary pyoderma cleared, the stasis dermatitis remained. Also observed was one case each of parapsoriasis, infantile eczema, atopic eczema with secondary pyoderma, and eczematoid dermatitis of the forearms of undetermined cause. No improvement was noted in these except that the secondary pyoderma associated with atopic eczema cleared rapidly.

The seborrhea sicca in 3 patients which failed to improve, may actually have been psoriasis of the scalp. Psoriasis in 4 of 7 patients was originally diagnosed as seborrhea sicca and the diagnosis later changed to psoriasis after reinvestigation and the finding of signs of psoriasis elsewhere, such as pitting of the nails and typical silvery scaling plaques on the elbows and knees.

Irritation occurred in 4 of the last group of 15 patients. In each instance, some previous medication had also caused burning and a secondary erythema. This was judged not to be a sensitization reaction to the sodium sulfacetamide but rather a reaction caused by the lotion base. Patch tests performed on one patient were negative. Patch tests in the other three instances of secondary dermatitis were refused.

Acne ranging from mild to severe existed concomitantly in 27 of the 40 patients with seborrhea sicca. Paradoxical results were obtained when scalps were oily or dry. When the hair was either excessively oily or excessively dry the patients reported gratifying results with less oiliness or dryness. In instances of seborrheic dermatitis of moderate severity with considerable loss of hair, the hair loss rapidly diminished once the disease process was brought under control. Several recurrences of seborrheic dermatitis during treatment were attributed to laxity in application. They cleared rapidly with vigorous treatment. Seborrhea sicca in 2 patients seemed to become worse after two weeks treatment but cleared with continued therapy. This investigator feels that this lotion* is an aid in differentiating seborrhea and psoriasis in borderline cases.

SUMMARY AND CONCLUSIONS

A NEW lotion* containing 100 milligrams of sodium sulfacetamide per gram of cream-type lotion, gave excellent results in the treatment of 75 patients with seborrheic dermatitis, seborrhea sicca, and other dermatoses.

Seborrheic dermatitis was completely cleared in 14 of 20 patients (70 per cent), and the remaining six (30 per cent) were improved.

Of the 40 patients with seborrhea sicca of varying degrees of severity, 37 (92 per cent) were improved or cleared. Several dermatoses complicated by secondary bacterial infection were remarkably benefited by rapid clearing of the pyoderma following the topical application of sodium sulfacetamide.

This lotion* appears to be the treatment of choice in seborrhea sicca and seborrheic dermatitis of the scalp. No sensitivity reactions to this preparation were encountered.

851 Avenue C.

A bibliography of 12 citations appears in the author's reprints.

Mango Dermatitis

The mango, which has become so popular in recent years that it can be bought at almost any neighborhood fruit store, has been found to cause skin trouble, especially among persons who react strongly to poison ivy. Dr. Lawrence C. Goldberg reported on two such cases in the Nov. 6, 1954 Journal of the American Medical Association. He said that mangoes can be eaten even by the most sensitive persons, if the fruit is carefully peeled and the skin is not handled.

The mango, which is orange-yellow-red when ripe, is a member of the same family as poison ivy, sumac and pistachio. On the fruit's thin skin can be seen spots, containing cardol, which is like the toxic substance of poison ivy. These spots come from the sap which comes off the tree stem when the fruit is picked.

Contact with cardol may cause an outbreak around the mouth of a rash that is usually bumpy and sometimes blistery. It burns and itches. The rash also may break out on the fingers. Intestinal disorders sometimes result.

Goldberg told of a ten-year-old boy whose whole family had eaten mangoes with the skin still on, not knowing the fruit should be peeled. The boy previously had been treated for poison ivy and was the only one of the family to suffer from mango skin rash. A 56-year old woman, who also had suffered poison ivy attacks, had noticed itching and burning daily while eating peeled mangoes. After her rash was cured, she was told she could eat the fruit if someone else peeled it.

Goldberg said the skin disease should be watched for during the mango season—May, June and July—and that the fruit should be peeled. Persons sensitive to poison ivy should be specially cautious about handling the fruit, but can safely eat the pulp.

Nicholas G. Demy, M.D.
Plainfield

The Ancillae

A Plainfield roentgenologist reminds us that the isolation or exploitation of any one branch of medicine affects us all. He also adds a necessary semantic footnote.

About 35 years ago, Garrison quoted a complaint that "the time-honored faculties of the physician were being subordinated to the ancillary services of the laboratory and x-ray." The phrase caught on without any one bothering to question the inept use of "ancillary."

John Locke wrote that there " . . . are words frequent enough in every man's mouth; but if a great many of those who use them should be asked what they mean by them, they . . . would not know what to answer; . . . that they have learned those sounds, and have them ready at their tongues ends, yet there are no determined ideas laid up in their minds."

Let us now define our terms and get the facts straight. "Ancillary" is derived from *ancilla*—of or pertaining to maidservants, with the current meaning of subservient or subordinate. Perhaps "auxiliary" was intended, and perhaps that may have been so when the radiologist was in the cellar where association with the kitchen help was natural. The specious use of "ancillary service" for this most useful diagnostic tool still continues even though many time-honored but primitive methods of physical diagnosis yield only clinical misinformation.

If any one wishes an exercise in epistemology, let him regard the 500 signs, symptoms, syndromes and phenomena covering 18 pages in Dorland's Medical Dictionary. What urologist, orthopedist, internist or phthisiologist would practice without a definitive x-ray diagnosis? The x-ray is helpful in making a diagnosis in but 20 per cent of all disease, yet this group comprises 90 per cent of man's major afflictions.

One might be inclined to regard an "ancillary" designation as a trivial ignorance except that the very men with a limited knowledge of radiology give themselves airs on the subject and berate the radiologist's supposed lack of general clinical training. It also gives the hospitals a proprietary interest, and the radiologist's captivity is an example of a growing trend in the hospital practice of medicine which will embrace even the white-togaed Olympians on the upper floors.

Perhaps all this is merely part of a larger social movement. Let us recognize that hospitals are becoming efficient centers for the integrated practice of medicine; that labor now includes medical benefits as part of the worker's return from industry; that social planning to include health is a proper concern of government; that we have become a nation health-conscious to the point of hypochondria; that an ill person resents not only the illness but the injustice of having also to pay for the unwanted distress, and that we prefer to have someone else — insurance or government—bear the cost. If so, then it will make very little difference for those of us already in the ancillary services whether

it be a layman in Washington, in an insurance plan, a Foundation, the unions or the hospitals who will dictate the conditions of our practice—or employment.

More than 30 years ago, Dr. Frank Lahey warned that unless physicians took an active part in hospital administration and medical politics, the control of medicine would be taken over by laymen. That prophecy has come true. "Organized medicine" is a sad misnomer; we are 200,000 individual idiot-savants who think their function and obligation in society ends with professional competence and curing of illness. Obligation to the welfare and independence of their own group, as well as to the welfare and balanced needs of the entire society we live in are forgotten. Who wants to die for Danzig?

No sermon is complete without its Devotion, and to those physicians who feel so secure that they can choose to remain aloof from the political problems of medicine, I would offer the sublimely beautiful Devotion of John Donne:

> No man is an Iland, intire of itselfe; every man is a peece of the Continent, a part of the maine: if a Clod bee washed away by the Sea, Europe is the lesse, as well as if a Promontorie were, as well as if a Mannor of thy friends or thine owne were; any man's death diminishes me, because I am involved in all Mankinde; and therefore never send to know for whom the bell tolls; it tolls for thee.

912 Prospect Avenue

Pacifiers Back in Approval Again

There is no scientific reason why pacifiers should not be used in preventing a child from sucking his thumb, insists Dr. Louis F. Rittelmeyer of the University of Tennessee Medical School. In the April 1955, *GP Magazine*, Dr. Rittelmeyer attributes objections to pacifiers to a physician's personal bias.

Some say pacifiers are dirty and cause air swallowing and colic. Dr. Rittelmeyer points out that bacteriologic studies have shown that children's thumbs are ten times dirtier.

In enumerating the merits of pacifiers, the Tennessee physician relates that of 364 children studied, 27 per cent of the children who did not use pacifiers were thumb-suckers. In only 6 per cent did the pacifier fail to prevent thumb-sucking in those who used the device.

In another study it was found that there were 129 thumb-suckers among 259 children and that 42 per cent of them continued to suck their thumbs past the age of 2, and 21 per cent continued past the age of 6. Thirty-two children in this study used pacifiers; and only four of them ever sucked their thumbs.

Dr. Rittelmeyer says there is seldom any difficulty in discarding a pacifier and herein lies its value as a preventive of thumb-sucking. If the parents wish to, they can "lose" it any time after the baby's second birthday without fear of thumb-sucking developing. However, the child's wishes should be considered, he counsels. There is no harm in letting him continue to use the pacifier to go to sleep if he wants it.

Alvin A. Rosenberg, M.D.
Morristown

Emergency Treatment of Uncomplicated Myocardial Infarction*

In simple, step by step fashion, Dr. Rosenberg outlines the technics of treating—and managing—a case of uncomplicated myocardial infarction. He discusses the sensible application of rules about rest and effort, he reviews the available drugs, and points out what else may be done.

The first thing the physician must do in acute myocardial infarction is to relieve the pain as quickly and as effectively as possible. The amount of pain and apprehension will vary. Usually enough will be present to require a suitable narcotic. Morphine is the most potent analgesic available today. Regardless of the severity, type, and duration of the pain, morphine sulfate administered in doses of 10 (1/6 gr.) or 15 milligrams (1/4 gr.) parenterally will give satisfactory relief from pain in 90 per cent of cases.[1] It is given intravenously with atropine (1/150 grain) in 2 milliliters of sterile water over a period of two minutes. It is most gratifying to the physician and the patient to find the pain gone before the injection is finished. Subsequent doses may be given subcutaneously at one-half to four hour intervals depending on the severity and time of recurrence of the pain. Other drugs such as Demerol® 50 to 100 milligrams; Pantopon® 20 milligrams; or Levodromoran® 1 to 2 milligrams may be substituted after the initial dose of morphine. Levodromoran® is very effective and a good replacement should the patient be unable to tolerate morphine.

Usually, one or two injections of a narcotic will control the pain. Should it not, other therapeutic measures should be tried rather than other analgesic drugs or higher dosages. If narcotics are pushed, there is danger of sudden absorption of a cumulative dose, dangerously depressant to the respiratory center or productive of narcosis and stupor. If such narcotic overdosage were to occur, Nalline® (N-allylnormorphine hydrochloride), a specific narcotic antagonist, should be injected intravenously, 5 to 10 milligrams every fifteen minutes until adequate pulmonary ventilation is obtained.

Other procedures used to relieve the pain of myocardial infarction include papaverine, aminophylline, alcohol, stellate ganglion block, oxygen, and anticoagulants. The two latter are used primarily for other purposes discussed below, but will often control pain when other measures have failed.

OXYGEN THERAPY

Oxygen may relieve the pain of an acute myocardial infarction when other measures fail, but it is not used primarily for this purpose. By bringing a higher concentration of oxygen

*From the Department of Medicine, All Souls Hospital, Morristown.

1. Batterman, R. C.: Modern Medicine 19:59 (1951)

to the injured areas of myocardium *via* the collateral circulation, the amount of necrosis of muscle fibers may be decreased. For this reason it should be given to most patients with an incipient or acute infarction during the first few days. Of course, if hypoxia is present for other reasons, it should be continued longer. If the patient is significantly emphysematous, oxygen should be administered with caution. To give oxygen when in doubt is far better than to refrain from using it until irreversible changes have taken place in the circulation.

ANTICOAGULANT THERAPY

ACCELERATED coagulability of the blood occurs in 74 per cent of patients with myocardial infarction as detected by the heparin clotting time, compared with an incidence of 7 per cent in patients with cardiovascular disease but without myocardial infarction.[2] The advantages asserted for the use of anticoagulants are: decreased mortality, and a greater decrease in morbidity from venous thrombosis of the legs with resultant pulmonary emboli, lessened development of mural thrombosis of the heart with possible embolization to the pulmonic or systemic arteries, reduced incidence of secondary coronary thrombosis or spread of the initial thrombus proximally or distally.[3]

Anticoagulants should be used cautiously or not at all if the following conditions are present or uncorrected:[4]

1. Prothrombin deficiency due to severe hepatic disease, lack of vitamin K absorption in biliary obstruction, or lack of vitamin K synthesis in the bowel due to effect of the antibiotics on the intestinal flora.
2. Vitamin C deficiency.
3. Renal insufficiency.
4. Blood dyscrasias with impairment of the mechanism of hemostasis.
5. Interruption of the continuity of the vascular system by surgical operation, especially on the central nervous system and the prostate; or ulcerations or wounds such as peptic ulcer, postoperative tube drainage of wounds of viscera; operations performed in the presence of obstructive jaundice; external fistula, or severe liver damage.
6. Late pregnancy.
7. Subacute bacterial endocarditis.

In using the anticoagulants, first draw blood for a control prothrombin time and Lee-White coagulation time. If normal, give intravenously 50 to 100 milligrams of aqueous solution of heparin for the first dose followed by 50 milligrams every four hours; simultaneously, give 300 mg. Dicumarol® orally. The heparin is administered through an indwelling polyethylene needle or tube to which a rubber stopper is applied, thus alleviating the discomfort of multiple venipunctures. It is continued until the prothrombin time, tested daily, reaches 2 to 2½ times the control value if below 20 seconds by the Quick method. The blood sample for this test must be taken just *before* a dose of heparin is due to be given, and should not be taken from the polyethylene needle through which the heparin has been administered, since heparin also prolongs prothrombin time. It is not necessary to measure the clotting time after the first determination, although some authorities recommend that it be tested one-half hour, two hours, and three and one-half hours after the first dose, in order to detect the clotting time prolongation and the duration of the effect. If the clotting time exceeds 20 minutes at three and one-half hours, no additional heparin is given.

Daily doses of Dicumarol® are given as soon as each prothrombin time is reported. One may give 200 milligrams daily if the prothrombin time is below 30 seconds, 100 milligrams if it is between 30 and 34 seconds, and none if above 35 seconds. Smaller doses should be given in old age or if anemia, renal suppresion, malnutrition, dehydration, or knowledge or suspicion that the patient is a hyper-reactor is present. When the prothrombin time falls below 30 seconds the Dicumarol® is again resumed. Tromexon® and other oral anticoagulants are said to give just as good results as Dicumarol® when used properly, but I have had little experience with them.

Should the prothrombin time rise to 60 seconds or should bleeding occur give 60 to 72 milligrams of vitamin K-active compound such as Menadione®, and repeat this dose every

2. Rosenthal, R. L., and Weaver, J. C.: Circulation 6:257 (1952)
3. Wright, I. S., Marple, C. D., and Beck, D. F.: American Heart Journal 36:801 (1948)
4. Wright, I. S.: Circulation 2:929 (1950)

four hours until the prothrombin time has decreased to a therapeutic level or bleeding has stopped. If bleeding persists or the prothrombin time is over 100 seconds, fresh whole blood should be given by transfusion. Recently, an aqueous emulsion of vitamin K_1 has become available for use in hypoprothrombinemic states under the name of Mephyton® (Merck). It is given intravenously in doses of 50 to 150 milligrams diluted in 10 to 50 cubic centimeters of water. It offers several therapeutic features which make it the agent of choice in such states, since it is said to be unfailing in action. An effect may be detected in 15 minutes, and a safe prothrombin range may be achieved in three to six hours. Complete reversal of anticoagulant effect takes place in four to twelve hours, and bleeding is usually checked in three to six hours, occasionally less, without blood transfusion, and the dangers inherent in transfusion of blood. Repeated administration of Mephyton® may be necessary in severe hemorrhage due to hypoprothrombinemia.

Bleeding due to heparin usually can be antagonized effectively by the administration of protamine sulfate (50 to 100 milligrams), but its short action is inherently a safeguard against prolonged hemorrhage. Vitamin K or K_1 is not effective in counteracting the effect of heparin compounds. An adequate heparin effect is considered to be a coagulation time of 30 to 45 minutes, or three times the normal coagulation time of 9 to 15 minutes with the Lee-White method.

Depo-heparin or heparin in Pitkin menstruum may be used once or twice daily instead of aqueous heparin at four hour intervals. The former are painful after injection, and more frequent accurate clotting time determinations are necessary for good control. Since the polyethylene needle is now available, there is no reason to use the long-acting preparations for hospitalized patients. They are of value for the patient kept at home since fewer injections are necessary. Either preparation is given deep subcutaneously in a first dose of 300 milligrams, if the patient weighs less than 150 pounds, or 400 milligrams in heavier patients. This is followed by 200 milligrams every 12 hours thereafter, always providing that the clotting time is less than twenty minutes before the next dose is administered.

VASODILATING DRUGS

Papaverine, alcohol, and aminophylline have already been mentioned. Their disadvantages seem to outweigh their advantages for routine use. The anticoagulants have proved more effective in several patients than any of these drugs in producing coronary vasodilatation and relief from pain, previously uncontrolled or relieved only by narcotics. Nitroglycerine, gr. 1/100 to gr. 1/200, sublingually, may be given for anginal attacks occurring after the acute stage has passed, and there is no longer any fear of a drop in blood pressure precipitating shock.

ANTIBIOTIC THERAPY

It is a common fallacy that the fever occurring two or three days after an acute myocardial infarction indicates infection and necessitates the use of an antibiotic. This fever is due to tissue necrosis. An antibiotic, such as aqueous procaine penicillin, 600,000 units intramuscularly daily, is necessary only if pulmonary congestion is present, in the hope that it might prevent hypostatic pneumonia. Of course, if an infection of some type is present, the antibiotics and other proper treatment should be prescribed. Antibiotics, especially those taken orally, can affect the prothrombin time in the same direction as Dicumarol® by preventing bacterial synthesis of vitamin K in the bowel, hence leaving less available for conversion to prothrombin in the liver. Therefore, more caution should be observed in the administration of an anticoagulant when an antibiotic is used.

HYPERPYREXIA

The fever caused by the tissue necrosis of acute myocardial infarction may exceed 102 or even 103 degrees. This increased metabolism and work of the heart serves no useful

purpose. It is desirable that the temperature be reduced to a more normal level. Salicylates or other antipyretics should be used to reduce the temperature, but with more than usual care in such a case, since salicylates often prolong the prothrombin time.

DIETOTHERAPY

DURING the first few days of an acute myocardial infarction a 1000 calorie fluid diet low in salt and fat is prescribed. Water is given as desired, and is almost never limited in amount, even with congestive heart failure. As the appetite improves, the diet becomes more solid and the amount may be increased from 1000 to 2000 calories depending on the patient's weight. Salt intake is limited to 500 milligrams daily, until one is sure congestive heart failure or pulmonary congestion is not present, impending, or likely to occur. This restriction may then be lifted, but not completely, since an unlimited salt intake may precipitate failure in a borderline, but not decompensated, heart.

Page[5] suggests the fat in the diet be kept at one-fourth the total number of calories. In view of recent work indicating a relationship between dietary fat and atherosclerosis, Keys[6] has stated that a substantial measure of control of the development of atherosclerosis in man may be achieved by control of the intake of calories and of all kinds of fats, with no special attention to cholesterol intake. It is well for the practitioner to note and apply some of this newer knowledge in the immediate post-infarction period.

PSYCHOTHERAPY AND REST

THE following routine is employed by the writer to procure the desired physiologic and emotional rest for a patient with an uncomplicated acute myocardial infarction:

1. Only the immediate family is permitted to visit the patient while he is still in the hospital. The visits of friends, while welcome, are unduly fatiguing and should be avoided. The telephone should be disconnected. No business should be engaged in until convalescence is well along.

2. Elimination is facilitated by the use of 15 to 30 milliliters of mineral oil nightly. After 2 or 3 days or when the patient begins to complain of lack of a bowel movement, mineral oil, 120 milliliters, is instilled rectally, and followed after an hour by a 500 milliliter tap water enema. Thereafter, when no bowel movement occurs on one day, a tap water enema or glycerine suppository may be used on the next day. The latter is efficacious and much easier on the patient as well as the nursing staff. When the patient feels well enough (and in the absence of shock) he is helped to a commode. Benton, *et al.*[7] have shown experimentally that there is less strain on the heart with use of a commode rather than the bed pan. The patient is allowed to void standing if urinary retention occurs.

3. From the commode or from the bed the patient is moved to a comfortable armchair when pain is gone and no evidence of shock is present. Be sure that the patient is ready for this move. Patients have been so indoctrinated with the need for strict bed rest in myocardial infarction that they should first be informed of the benefits to be gained by this procedure. The patient is allowed to sit in the chair with his feet dependent as long as he desires, and then is helped back to bed. He may sit in the chair again later in the day. If he is in congestive heart failure he should be encouraged to sit up as long as possible without undue fatigue.

4. Exercise of the toes and ankles and deep breathing are encouraged every hour or two to decrease venous stasis and pulmonary atelectasis.

5. Smoking is discouraged. Alcohol in moderation is permitted, if desired.

6. When he feels like it, the patient is allowed to feed himself, read, sew, or knit. Men

5. Page, I. H.: Circulation 10:1 (1954)
6. Keys, A.: Circulation 5:115 (1952)
7. Benton, J. J., Brown, H., and Rusk, H. A.: Journal of the American Medical Association 144:1443 (1950)

are allowed to shave and wash the face after three weeks of rest.

7. The administration of a mild sedative such as phenobarbital during the day and a hypnotic at night is helpful.

These procedures have, in my experience, resulted in a much smoother convalescence with improved morale, a decrease in neurotic symptoms, a faster gain in strength, decreased dyspnea and pulmonary congestion. For the nursing staff the armchair-commode method of treatment is a great help, since they can make the bed while the patient is in his chair and the patient need no longer be lifted up for insertion of a bed pan. A caution which must be observed with the armchair method of rest is to restrain the patient from walking prematurely, even though he feels strong and well.

8. After 5 weeks, if no complications have occurred, the temperature is normal, and the sedimentation rate falling, the patient is gradually made ambulatory. At the end of the sixth week he is sent home, where he spends another 6 weeks before returning to work. It is preferred that he stay on one floor during this period and avoid stair climbing unless done very slowly. After 3 weeks of rest and sedentary activities about the house, he is allowed out for short walks and automobile rides, if it is not cold or windy.

After 6 weeks of such gradually increasing activity he is advised to return to work, providing the sedimentation rate is normal, the electrocardiogram stabilized, and any complications have been adequately treated. The patient should have some restriction of activity probably for the rest of his life. Heavy labor and strenous competitive sports should be avoided. However, such a person is capable of resuming his occupation with a sensible slowing of his pace. It is the pace and not the job that matters most. There has never been any evidence that extreme restriction of activity with its resultant invalidism can prevent the progress of atherosclerosis in the coronary arteries, or prevent coronary occlusion. However, if complications such as congestive failure or frequent anginal pains appear, much more drastic limitation of physical activity does become necessary.

8. Levine, S. A.: American Heart Journal 42:406 (1951)

9. Baer, D. P.: Circulation 8:641 (1953)

SUMMARY

1. Acute myocardial infarction is a serious condition, but the prognosis has been greatly improved by recent developments. The application of anticoagulant therapy to this disease has been a great advance in decreasing its mortality and morbidity.

2. Levine[8] shows that complete bed rest is unnecessary. The work of the heart is less if the patient is allowed to sit in an armchair. This has done much to improve the prognosis and make convalescence from infarction more bearable for the patient. Research on fat and cholesterol metabolism with emphasis on the role of diet and of the female sex hormone in preventing atherosclerosis will probably prove of monumental importance in the prevention of this grave disease.[9]

3. Industry is now recognizing that a person who has had a coronary thrombosis is not necessarily incapacitated. He may return to productive work. This is valuable to the patient in preventing morbid over-concern and hypochondriasis, providing a livelihood, and equally of value to the industry to which he gives services for which he has been prepared by years of training and which would be wasted if he were denied the right to return to his job.

4. We are on the threshold of important advances in the control of a disease which, at present, accounts for the major loss to society of individuals in their most fruitful period of life.

22 High Street

Adolph D. Casciano, M.D.

Jersey City

Atherosclerosis: Fact and Fancy

In this scholarly review, Dr. Casciano traces the prerequisite for atherosclerosis to alterations in the vessels themselves. He ascribes only a secondary role to elevated lipid levels.

In a recent symposium[1] the moderator asked "Has it been proved that human atherosclerosis results from the ingestion of cholesterol and/or fat?" The first discussant said 'yes.' The second replied "The answer is a plain and simple 'no.'" The third said "We would consider that the ingestion of fats and cholesterol, while most likely not responsible for the lipoprotein metabolic error and hence not the basic cause of atherosclerosis, can definitely contribute to atherosclerosis in many individuals because of the susceptibility of such individuals to the alteration of lipoprotein levels through diet."

It is apparent from the answers given by these outstanding students of the problem that there is a wide divergence of opinion despite the impact of recent investigations of lipoid metabolism. These studies have made so firm an impression upon our thinking that the term "arteriosclerosis" has all but vanished from the literature being replaced by the word "atherosclerosis." While this is admittedly more descriptive, it describes only a certain phase of the process, a most important one to be sure. Although deposition of calcium also occurs in arteriosclerosis, no one has had the temerity to suggest that this represents an error of calcium metabolism. Is it possible that from this maze of data, much of it conflicting, certain reasonable conclusions can be drawn without doing violence to the facts? Can inferences be made which do not overreach themselves by soaring fantastically beyond the horizon of our present knowledge? It is my opinion that both questions can be answered affirmatively and it was for this purpose that the present review was undertaken.

Until recently arteriosclerosis was regarded as an unavoidable concomitant of the passing years with the vasculature sharing the changes of senescence and decay exhibited in other tissues. This theory (which presupposes neither cure nor prevention) for many years exerted a stagnating influence and produced a feeling of futility. Today there is a widespread, though not universal, belief that arteriosclerosis is due entirely to a disturbance of lipoid metabolism leading to infiltrations of cholesterol within the intimal lining of arteries. Age and intravascular stresses are presumed to play a minor, if not inconsequential, role. This concept has stimulated intensive and fruitful research in lipoid metabolism and substituted a sprightly optimism in place of the frustrating fatalism of the "senescent theory." But this hypothesis brushes aside certain empirical facts which refuse to remain banished but keep returning to taunt us. These disconcerting realities will be discussed in greater detail later.

PATHOLOGY

The first recognizable manifestation of atherosclerosis consists of the familiar yellow streaks or flecks with little if any elevation of

the intima at this stage. These lipoid deposits occur predominantly in the aorta, although the smaller and medium-sized vessels also share in the process. The most dangerous involvement is that of the smaller arteries of the heart and brain. This accounts for a large portion of the sudden catastrophes seen clinically. In the aorta the posterior wall is first involved, particularly in the descending portion about the ostia of the intercostal arteries. The abdominal aorta is usually more affected than the thoracic.

The deposits of fatty material occur both as free droplets and intracellularly in macrophages in the intima, the "foam" or xanthoma cells. Thannhauser [2] believes that on this basis two processes of cholesterol accumulation in the arterial tissue should be distinguished: *intracellular* accumulation in which increased serum cholesterol is the primary cause; and *extracellular* precipitation and crystallization of cholesterol in a primarily altered arterial tissue. He considers the calcium deposits and cholesterol precipitation in the altered arterial wall to be analogous physiochemical processes secondary to the structural and physical changes of the tissue. The fact that cholesterol deposition has been frequently described in the aortas of infants and young people suggests that the process may be reversible but direct proof would be most difficult. As the deposits increase, the intima is raised and thickened, gradually losing its yellow color to assume a pearly grey translucency. Proliferation of fibroblasts with increase of collagen fibers occurs in varying degree. Occasionally a puddle of thick yellow lipoid material may erode through the intima to form an atheromatous ulcer. The rough surface of this ulcer provides a nidus on which thrombosis may occur. Fragmentation and rupture of the internal elastic membrane are frequent. Degeneration of connective tissue appears often and calcium deposits are common. Increased vascularization about the atheromata is not unusual, occasionally leading to hemorrhage within the plaque which may result in thrombosis and occlusion. The endothelial lining is histologically unaltered in the earliest lesions. The hazard arises from the gradual narrowing and obliteration due either to encroachment upon the lumen by the atheromatous deposits or from thrombosis. The term "atherosclerosis" will be used henceforth.

HISTORICAL BACKGROUND

OUR estimates of the length of time a disease has afflicted mankind are often based only on obscure Biblical allusions. It is otherwise with atherosclerosis, however, thanks to the fascinating research of Shattock [3] and Ruffer [4] as well as to the embalming skill of the Ancient Egyptians. It was conclusively demonstrated, with gross and microscopic studies, that atherosclerosis was a common affliction in Egypt as long as 3500 years ago. Those who believe that dietary factors exert a strong influence on the pathogenesis of this disease might point out that the pathologic studies were done on the mummies of the presumably well-fed members of the royal family and household. If today the anxiety and insecurity of the "cold war" and the hydrogen bomb predispose to atherosclerosis, then it must be presumed that to the Ancient Egyptian the future appeared equally ominous.

If atherosclerosis represents aging of blood vessels, it should occur fairly often in animals also. But such is not the case. In postmortem studies of animals permitted to live their life span in sheltered environments, evidence of atherosclerosis was practically nonexistent. Although birds frequently showed spontaneous atherosclerosis under these conditions, the lesions were rarely extensive or severe.[5]

ROLE OF LIPIDS

ALTHOUGH cholesterol is introduced into the body exogenously from food, it is also synthesized in the body [6] from low-carbon metabolites,[7] (especially the acetate radical) which are abundantly available from the "common metabolic pool." This endogenous source is estimated to be of the magnitude of 15 to 20 Grams daily, many times greater than the amount which can be ingested from food. Many tissues, particularly the liver, and per-

haps all cells, can synthesize cholesterol. One of the numerous factors affecting the rate of synthesis is cholesterol itself.[8] A very low rate of synthesis was found in liver slices from cholesterol-fed dogs to which C^{14} acetate had been added. This intriguing observation suggests a mechanism whereby the body protects itself against an exogenous onslaught of cholesterol. It adds additional weight to the argument that increased ingestion of cholesterol may not be etiologically related to an alleged disturbance of cholesterol metabolism in atherosclerosis.

The absorption of cholesterol takes place in the intestines being increased by the presence of fatty materials. Unlike herbivorous animals, man appears incapable of absorbing cholesterol of plant origin. Cholesterol is excreted in the bile in its free form. It is partly absorbed from the intestine as cholesterol and its bacterial-degradation products.[2]

The belief that atherosclerosis represents an aberration of lipoid metabolism is supported by convincing clinical and experimental observations. It has long been recognized that atheromatous infiltrations consist of cholesterol, free and esterified, phospholipids and neutral fats—ingredients normally utilized by the body. This was first surmised by Virchov[9] as early as 1856 on a purely histological basis[10] and later verified by chemical[11] determinations. The chemical composition of the atheromatous deposits being so like that of the plasma lipids, it was natural to assume that they were imbibed from the blood plasma through the intact intima. This is the "imbibition theory." Leary,[12] on the other hand, believes that as the excess cholesterol ester crystals collect in the liver cells they are taken up by Kupffer cells in unit droplets, 1 to 3 micra in diameter. He postulates that they are then released in showers into the blood stream, successfully traversing the pulmonary capillaries to enter the systemic circulation. The heavily-burdened macrophages penetrate the intima at selective sites where the zonal flow of the blood stream is interrupted, thus accounting for the focal distribution of the lesions. Additional evidence has been presented by Zilversmit *et al.*[13] casting doubt upon the origin of the intimal deposits. Radioactive phosphorus (P^{32}) was injected into normal and cholesterol-fed rabbits. A marked derangement of aortic phospholipid metabolism was found in the cholesterol-fed animals. However, the phospholipid found in the atheromatous aortas appeared to have been synthesized by the aorta itself rather than to have been deposited there from the plasma! Conversely, it has also been demonstrated that radioactive cholesterol when fed to animals can be detected in atheromatous infiltrations.[14] At present, the view is more widely held that plasma lipids flow through the endothelium episodically to form deposits of lardaceous mud within the intima. This is vividly characterized as the "delta theory."

Some individuals are prone to develop premature and severe atherosclerosis in association with diabetes, hypothyroidism, nephrosis, xanthomatosis and familial hypercholesteremia. These are all conditions typified by high levels of serum cholesterol. Moreover, man is more susceptible to atherosclerosis and his serum cholesterol levels are higher than those of other animals. Barr[51] has shown that in mammals which never develop spontaneous atherosclerosis the values of all the criteria of concentration and distribution of lipids differ from those of man. Among human beings only the infant at birth has a plasma lipid composition closely resembling that of immune mammals. It is reported[16] that patients with coronary thrombosis frequently have elevations of serum cholesterol but there are many exceptions. Such discrepancies have prompted investigations into other methods of estimating disturbances in lipoid metabolism for which greater accuracy is claimed. Cholesterol determinations leave much to be desired. There is no universal agreement on what constitutes the "normal range" except in a rather casual way. An extreme position is taken by Gould[17] who observes that a blood value of only 200 milligrams may be considered excessive when compared to the much lower levels in animals. He points out quite correctly that the pathologist is able to demonstrate atheromatous infiltrations in the aortas of almost all age groups including infants, and that in defining "normal" values in humans there are no "contro's."

Others [18] have also intimated that values generally accepted as normal are, in reality, atherogenic. On this basis, one reaches the logical but distressing conclusion that virtually all men will be stigmatized with hypercholesteremia by the time they cast their first vote and the ladies slightly later. If this be true, nonetheless hypercholesteremic man, despite his unique atherosclerotic affliction, with a few exceptions, outlives by far the more immune animals even when they are permitted to live out their natural lives in the most propitious environment of a zoological garden.

Considerable support of the thesis that aberration of lipoid metabolism is etiologically related to atherosclerosis comes from animal experiments. As early as 1913 Anitschkow and Chalatow [19] reported that when rabbits were fed large amounts of cholesterol they soon developed elevated levels of blood cholesterol and lesions in the arteries similar to those of humans. There were, however, some significant dissimilarities in the distribution of the lesions. They were more pronounced in the thoracic aorta and pulmonary artery, whereas in man the abdominal aorta is most heavily involved and the pulmonary artery hardly ever. In addition to the arterial lesions so induced, there were deposits also in the reticuloendothelial system and other organs.[20] Valid objections were soon made to this interesting thesis. The chief one was that herbivorous animals, though able to absorb animal cholesterol, have no effective method for excreting it and hence the precipitation in various tissues. The work of Dauber and Katz [21] successfully refuted much of this argument. They were able to produce atheromatous lesions in an omnivorous animal, the chick, by adding cholesterol to the diet. However, the applicability of this to man was still highly questionable because a 3000 calorie diet as food would contain not more than about 1.5 Grams of cholesterol; and also because the chick experiments transposed to man would require a daily diet of some 30,000 calories. Conceivably some human heroes could accomplish this epic feat occasionally, but it is unlikely that they could acquire the habit. Yet this is not a devastating criticism, for the chick is quite capable of developing a mild spontaneous atherosclerosis in a more leisurely fashion if not impetuously gorged with cholesterol to hasten the experiment.

A few years later atheromatous infiltrations were produced in the dog, a carnivorous animal with an extremely efficient mechanism for dealing with cholesterol. Because of his superlative resistance to cholesterol feeding, it was necessary to render him hypothyroid with thiouracil to achieve this result.[22] The converse [23] has also been shown to be true: it is possible to protect rabbits from cholesterol-induced atheromatosis by feeding thyroid substance. Despite important differences, there is enough similarity between the atherosclerosis artificially induced in animals and that in man to suggest a common bond. It need not be an etiologic linkage, however, for hypercholesteremia does not necessarily produce atherosclerosis. This relationship was studied by Duff and McMillan [24] in rabbits with alloxan-induced diabetes. Although hypercholesteremia was also present most of the animals did *not* develop atheromatosis. In the few animals who did develop lesions, the hypercholesteremia was *not* accompanied by a rise in phospholipid, suggesting that the hydrophilic phospholipids prevented deposition of cholesterol.

Although cholesterol is hydrophobic,[25] it is maintained in a clear colloidal state in the blood plasma by virtue of the hydrophilic phospholipids.[26] A relative or absolute increase of the latter enhances the stability of the solution. The ratio of cholesterol to phospholipid (C:P ratio) in the serum is approximately one. The concept that the hydrophilic phospholipids in some way keep cholesterol in solution is supported by the experiments of Kellner [27] with the wetting agents Tween® 80 and Triton® 20 in rabbits. He found that both of these surface-active detergents increase the stability of the serum and lower the C:P ratio. It is reported by Ahrens and Kunkel [25] that hyperlipemic states with an unfavorable ratio of cholesterol to phospholipid show a strikingly higher incidence of premature atherosclerosis. Although high phospholipid concentrations in the serum increase the solubility of cholesterol,

determination of the C:P ratio is not an entirely reliable diagnostic test.

As a result of further studies additional information has been acquired about the chemical and physical nature of the blood lipids. It is now evident that they combine freely with certain protein fractions forming lipoproteins. In this country Cohn and his associates [28] were able to separate these conglomerates by electrophoretic fractionation. Barr *et al.*[29] employed this method to study lipoproteins in atherosclerosis and related states. They found that the Alpha and Beta groups are bound with most of the cholesterol and phospholipid and that the amounts of these two fractions in young subjects showed a constant relation to each other. On the other hand, in patients with clinically evident atherosclerosis, as in coronary thrombosis, there was a relative and absolute increase of the Beta fraction, decreasing the Alpha:Beta ratio. This was found to hold even in such cases in which cholesterol was not elevated and the C:P ratio was one or less. The lipemia found in biliary cirrhosis reflected an increase in the Alpha lipoprotein. In their opinion such determinations are of diagnostic value.

Gofman and his co-workers [30] attacked the problem in a novel way, using the ultracentrifuge to fractionate. The large particles move according to their molecular size and the migration is photographically recorded. The unit of migration is called a "Svedberg unit" (Sf unit). On this basis four groups were separated. It is the Sf 10-20 group which Gofman [30] believes to be causally related to atherosclerosis. It appears likely that Gofman's Sf 10-20 molecules form part of the Beta lipoproteins. It is also suggested [31] that the larger molecules become progressively transformed to lower Svedberg classes and that the accumulation of the Sf 10-20 group represents a metabolic error in lipid transport or a metabolic arrest. Further studies [32] appear to refute the suggestion of abnormal transport. After injecting isotopically labeled lipoproteins into cholesterol-fed rabbits the labeled lipoproteins were uniformly distributed among all the Svedberg classes. In 230 cases of myocardial infarction, 91 per cent showed Sf 10-20 molecules above the borderline resolution level as against 50 per cent in a normal control group. Since they are present, though in smaller quantities, in the sera of normal individuals it is doubtful how much diagnostic and prognostic significance can be assigned to this method. Keys [33] states categorically that though there is substantial correlation between the concentrations in human blood serum of total cholesterol and the "giant molecules" of Gofman (Sf 10-20 class), neither method is a good discriminator between healthy persons and those suffering from coronary disease. If there is any advantage to one or the other in detecting or predicting coronary disease, it is in favor of total cholesterol.

Up to this point the problem has been considered mainly with respect to the cholesterol-induced atheromatosis in animals and the analytical studies of the blood lipids. With this perspective some highly illuminating facts and significant correlations were revealed but serious discrepancies were likewise apparent. There are other aspects of this puzzle which require consideration at this time.

Atheromatous plaques have been observed even in infancy. Beyond childhood, lesions are almost universally present. The disease rarely becomes clinically manifest before the mid-forties at which time there is a rapid and steady increase in deaths from cardiovascular disease. Closely matching the increased death rate the serum cholesterol rises yearly until the age of 55 and then decreases. The steady decline after middle life may indicate the demise of those with higher values rather than an actual decrease.[34] These statistics appear to give strong support to the belief that atherosclerosis is correlated with the aging of the individual; yet it is not rare to find remarkably little involvement in very old people. Closely related to the factor of aging is that of familial predisposition, clinicians having long been aware of the frequency with which coronary and cerebral thrombosis occur in certain families. That these families show a high incidence of hypercholesteremia comes as no surprise.[35]

The question of racial predisposition is in-

tricately tangled with dietary habits. It is said [36] that among Orientals there is a low incidence of the disease, particularly among the Chinese and Okinawans.[37] The inference is that the low fat and cholesterol content of their diet is protective. While the character of the Oriental diet is conceded, Gertler, Garn and White [38] raise serious objections to this hypothesis. Vital statistics in the United States may not be accurate but it is probable that they are considerably more accurate here than in the Orient. Infectious diseases, parasitic infestations and nutritional diseases cause many more deaths in the younger age groups in the Far East. Thus, fewer Chinese live long enough to develop cardiovascular disorders. Furthermore, in studying a group of men of whom 97 had coronary disease before the age of 40 and 146 who were presumably healthy, they [38] report that there was virtually no correlation between ingested cholesterol and serum cholesterol. They found no significant difference in the amount of cholesterol ingested by those with coronary disease and the healthy subjects. They conclude that there is no advantage in imposing a low cholesterol diet on patients with coronary disease.

In the United States healthy men show an increase in blood cholesterol and lipids closely paralleling the age trend of atherosclerosis. Keys and others [39] report that healthy Neapolitans ingest 20 per cent of their calories as fat compared to 40 per cent for Minnesotans; that from age 20 to the early thirties the average cholesterol concentration in Neopolitans corresponds closely with that of Minnesotans; that thereafter, in sharp contrast, it shows no further age trend in Neapolitans, so that by the age of 50 there is a mean difference of 30 milligrams per 100 milliliters. They report further that electrocardiograms show statistically significant differences between Italians and Minnesotans when correlated to age. Similar observations have been noted for other countries in which the diet has a low fat content. These provocative findings do not give a final answer to the question of racial susceptibility, nor do they resolve the controversy of the importance of ingested fat or cholesterol in the pathogenesis of atherosclerosis.

ENDOCRINE ASPECTS

That the thyroid exerts a potent influence on cholesterol metabolism has long been clinically recognized. Hypercholesteremia and a greater tendency to atherosclerosis are associated with thyroid deficiency. In such cases, serum cholesterol concentration is reduced when thyroid extract is given. In overactive thyroid states, on the other hand, the serum cholesterol tends to be reduced but not to a comparable degree. In cholesterol-induced atheromatosis, the rabbit is protected by thyroid feeding while the dog must be rendered hypothyroid to produce the lesions.

There is an increasing awareness that the female is more durable than the male. This is well supported both by actuarial statistics and by clinical observation. So unusual is coronary disease in women before the age of 45 that when confronted with the diagnosis it is logical to inquire if diabetes is also present. That the "weaker" sex enjoys a more favorable position with respect to atherosclerosis appears to be unquestioned. Ackerman and his co-workers [40] have shown that the incidence and severity of coronary atherosclerosis are considerably less at each age level in women. Incidence curves for the two sexes show a similar leveling off in the later decades. In men, however, this occurs after the sixth decade but in women after the eighth. Certainly the disease treats women more gently; the only question is as to the mechanism. One explanation for the sex difference in susceptibility was proposed by Dock.[41] He reported that the epicardial branches of the coronary arteries show a marked thickening of the intima not seen in other arteries. This is apparently an adaptation to the changing length during each heart cycle. The increased thickness is much more pronounced in males even at birth. The disparity is explained on the dynamic theory that males have slower pulses and higher stroke volumes. They would, therefore, have greater changes in length of the coronary arteries and, consequently, males should have thicker intimas. While such a thesis could account for the increased incidence and severity of coronary disease in men, it does not explain why the havoc of atherosclerosis is restrained in women in

other parts of the arterial tree as well. There seems to be some additional protective barrier available to women which is capable of deflecting the full fury of the lipoid inundations.

Perhaps the estrogenic hormones confer this relative immunity. There is considerable clinical and experimental evidence to support this view. Barr [15] has noted that the lipid composition of the healthy young woman deviates least from the pattern of newborn babies and immune animals, the Alpha lipoprotein and phospholipid fractions being higher, total cholesterol slightly lower, and the C:P ratio decreased. Furthermore, administration of estrogens can convert the highly pathologic lipid patterns of survivors of myocardial infarction to normal human values. Methyltestosterone, conversely, exaggerates the chemical pathology and may even produce abnormal patterns in those previously normal. Jones and his associates [31] have pointed out that the Sf 10-20 fractions rise more slowly in women during their sexual maturity than in men; and that it is not until well beyond the menopause, that the female reaches the concentration of Sf molecules most closely correlated with atherosclerosis attained by the male at the age of 30. Rivin and Dimitroff [42] report an apparent diminution of coronary atherosclerosis in males treated with large doses of estrogens; an increase in atherosclerosis (especially of the coronary arteries) in castrated females; and a decreased incidence of severe atherosclerosis in the hyperestrogenic female even less than that normally found. Eilert [43] has observed that the administration of estrogens to menopausal women altered the serum lipid levels causing a sharp reduction in the C:P ratio. Oliver and Boyd [44] report reductions by as much as 41 per cent of the total plasma cholesterol when estrogens were administered to 20 male patients with coronary disease and hypercholesteremia. Similarly, estrogens protect animals from cholesterol-induced atheromatosis. However, a discordant note in this otherwise harmonious refrain is struck by Glass and his associates [45] who were unable to detect any effect on the serum lipoproteins by the administration of estrogens.

VASCULAR FACTORS

We come now to the consideration of the vasculature itself. Here we encounter some of the most formidable objections to the theory that atherosclerosis is caused by a disturbance of lipoid metabolism alone. Atheromatous deposits produced in cholesterol-fed rabbits are most pronounced in the thoracic aorta and pulmonary artery. In man, the abdominal aorta is most heavily involved and the pulmonary artery almost never. By keeping cholesterol-fed rabbits in an upright position for five hours daily (thus increasing the intra-aortic pressure) Wilens [46] was able to produce more extensive atheromatosis of the aorta and more widely distributed lesions than in animals similarly fed but not subjected to this postural hypertension. Conversely, rabbits maintained in the upright position but not fed cholesterol showed no significant changes compared with control animals.

There is considerable clinical and pathologic evidence to indicate that intravascular stresses exert a potent effect on the distribution and severity of atherosclerosis. The predilection of the disease for the posterior wall of the aorta would suggest that these fixed portions do not expand freely during systole as do the unattached portions. Consequently, they are unable to dampen the full force of the systolic surge. Hypertension, a frequent companion of atherosclerosis, exerts an unfavorable influence on its clinical course. When atherosclerosis produces periphero-vascular insufficiency it is almost invariably in the lower extremities where the intravascular pressure is higher. In coarctation of the aorta the portion proximal to the constriction is severely compromised. The distal segment is spared. The pulmonary artery (a low pressure circuit) is singularly free even with the most atherogenic blood lipid composition. It is only when pulmonary hypertension supervenes (as in mitral stenosis, for example) that we see pulmonary artery atherosclerosis comparable to that of the aorta. Furthermore, a severe degree of pulmonary artery involvement is not infrequently seen in young patients with extreme degrees of mitral stenosis even though their blood lipid profiles may

be least atherogenic. The venous system, though constantly bathed with the same blood lipids, maintains an austere aloofness. It seems clear that an elevated intra-arterial pressure increases the penetrability of the arterial intima to the blood lipids. Whether this is a purely physical effect caused by the increased lateral pressure, whether it is due to some subtle antecedent change induced in the arterial wall, or a combination of factors is a matter of conjecture at this time. Impressive evidence does compel the conclusion, however, that intravascular stress is a powerful force in the pathogenesis of this disease.

The frequent association of atheromatous lesions with syphilitic aortitis is well known. Since syphilis is primarily a disease of the lymphatics which accompany small blood vessels,[47] such as the vasa vasorum, one wonders whether the increased plaque formation is caused by some structural or chemical change induced in the wall of the aorta or to interference with the normal removal of the lipoid material due to blockage of the lymphatics. Whatever the mechanism may be it is patently *not* due to an error of lipoid metabolism. Also difficult to reconcile with the lipoid theory is the fact that some lesions contain no lipoids but are entirely fibrous, unless one assumes that the fatty material has been absorbed leaving only a fibrous tissue residue.

COMMENT

As a result of these considerations, certain questions arise to which there are no clear answers at present. *The focal character of the lesions cannot be explained satisfactorily by the thesis that atherosclerosis is due entirely or predominantly to a disturbance of lipoid metabolism.* If, on the other hand, an abnormality of the arterial intima predisposing it to lipoid infiltration were present, it would be reasonable to suppose that certain changes in the plasma lipids could accelerate the process. Even if we concede that, in extreme cases, the plasma lipids could be sufficiently altered so as to invade a normal artery, such a mechanism still cannot explain the focal distribution. It seems that the atheromatosis produced in animals might possibly fall into this category, for it would be reasonable to assume that there was no abnormality of the intima to begin with; however, for reasons already mentioned, there is no clinical counterpart to the animal experiments. Furthermore, the experimental lesions can be reversed in animals when the cholesterol assault is terminated, indicating that the normal intima is capable of ridding itself of these deposits. There is a suspicion, or perhaps it is more appropriate to call it a hope, that the same thing may occur in man. But there is no direct proof. Aschoff[48] first suggested that atheromatous infiltration may be preceded by some poorly understood alteration of arterial tissues and that elevated blood lipids may exert an additive effect without necessarily being the direct cause. This view has been expressed by many others since then. With all due respect to the ingenuity and enthusiasm displayed in recent studies of lipoid metabolism no evidence has been presented which successfully refutes this concept. Attention is directed to recent impressive studies of Lansing[49] who reports consistent and significant age changes in the elastic tissue of arteries correlated with the incidence of atheromatosis. In addition to fragmentation and shifting in location of elastic tissue, a marked affinity for calcium was noted. Although these changes were present in the absence of plaques, the existence of such plaques without underlying elastic tissue calcification was never found! These observations were verified with quantitative calcium analyses. Similar determinations on the pulmonary artery failed to reveal the progressive increases with age noted for the aorta. When pulmonary hypertension was present (as in young subjects with mitral stenosis) not only was atherosclerosis noted but also increased calcium content of the medial elastic tissue. It is suggested that calcification of medial and elastic tissue is essential to intimal plaque formation.

When the evidence now available is dispassionately considered, it seems most likely that some physical or chemical change in the arterial wall, as yet poorly understood, is the primary factor in initiating the atheromatous

lesions. Disturbances of lipoid metabolism, in so far as they can produce alteration of the blood lipids, are capable of accelerating the formation of plaques but not their distribution. The accumulation of lipoid material within the intima is capable at times of setting off a chain reaction response by provoking such tissue reactions as proliferative fibrosis and degeneration. This adds further havoc and destruction to that already present.

THERAPY

THE detergents presently available are too toxic for human use. Heparin[51] injected intravenously can cause abnormal serum lipid patterns to revert toward normal. But it is too cumbersome to be practical for long range therapy. Except for the use of thyroid extract to reverse the hypercholesteremia of thyroid deficiency, no other endocrine therapy appears generally applicable at this time. Lipotropic agents have been disappointing; despite the enthusiasm in some quarters, there is now no valid evidence to justify their use.

Keys[51] was able to effect a significant reduction of the total serum cholesterol only with a rice-fruit diet, that is to say, virtually a fat-free, cholesterol-free diet. Reduction of cholesterol intake by 50 per cent or more failed to change the serum levels over a period of months. He could detect no significant correlation between dietary cholesterol intake and serum cholesterol levels. This lack of correlation has been noted by others.[38] However, even when the serum cholesterol is reduced with drastically restricted diets, the cholesterol slowly begins to rise to its pre-dietary level. This is not surprising when it is recalled that the body is able to synthesize 10 to 15 Grams of cholesterol daily, and that removal of the exogenous source of cholesterol may also remove a restraining influence on its synthesis. Keys[51] believes that it is far more important to restrict the fat intake and that the effect on the serum cholesterol is virtually the same irrespective of the cholesterol content. One can conclude that within the average limits of ingestion, the serum cholesterol level is independent of the dietary cholesterol. It does not seem that dietary management offers much in the way of effective treatment. In the present state of our knowledge, moderate restriction of the fat content of the diet is the best available prophylaxis. More severe restrictions, if used at all, should be reserved for those with rapidly advancing atherosclerosis and elevated blood lipid levels.

CONCLUSIONS

FROM the evidence now available it seems likely that a prerequisite for the formation of atheromatous plaques must reside in the arteries themselves. The nature of the alteration in the receptive tissues is poorly understood. It may be a structural change not discernible by present histologic technics, or, perhaps, a chemical change. The focal distribution and extensiveness of the lesions would appear to depend primarily upon the degree of antecedent changes in the arterial wall. Elevated serum lipid levels by a sort of mass action effect can hasten and enhance the formation of atheromata when the appropriate substratum is present. Increased intravascular pressure also accelerates the deposition of lipoids. Whether this is due to pressure alone or to other factors is not known. Atheromatous plaques, once formed, are capable of inciting further destructive changes within the arteries. These can be lethal. Rigid dietary restriction can attenuate to a slight degree, the accelerating influence of elevated blood lipid levels but not the primary alteration of arterial tissue. The key to the riddle still appears to lie hidden within the arteries themselves.

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A bibliographic list of half a hundred citations appears in the author's reprints.

State Activities • • •

Proposed Constitution and By-Laws Changes Invalidated

At a regular meeting on May 22, the Board of Trustees received and concurred in an opinion submitted by Mr. Gerald O'Mara, legal counsel to the Society, concerning the validity of the recent actions of the House of Delegates with reference to proposed amendments to the Constitution and By-Laws affecting the Board of Trustees and the Judicial Council.

Counsel declared those actions invalid (1) because of lack of compliance with procedures —set forth in Article XII of the Constitution and Chapter XV of the By-Laws—which require submission of all proposed amendments to a Committee on Revision of Constitution and By-Laws, prior to introduction in the House; and (2) because the proposed amendments voted upon at the final session of the House were, in certain sections, substantially different from those read at the first session.

Accordingly, the Board of Trustees unanimously adopted a motion declaring invalid the actions of the House of Delegates with reference to proposed amendments to the Constitution and By-Laws affecting the Board of Trustees and the Judicial Council, and directing that all county societies be so notified, and that notice of this action be published in THE JOURNAL.

The Board also acted to establish a Committee on Revision of Constitution and By-Laws to consist of three members of the Board, with legal counsel to the State Society acting in an advisory capacity.

The Board, by unanimous action, further resolved that in the future proposed amendments to the Constitution and By-Laws must be received in the Executive Offices by March 1 for the consideration of the Committee on Revision of Constitution and By-Laws in advance of the next annual meeting. It was further agreed that proposed amendments in the form approved by the Committee on Revision of Constitution and By-Laws should be published in THE JOURNAL prior to the annual meeting.

Poliomyelitis Surveillance

The New Jersey State Department of Health has been designated as the New Jersey poliomyelitis surveillance center by the United States Public Health Service.

All cases of poliomyelitis, paralytic and nonparalytic and the immediate contacts of such cases should receive diagnostic laboratory services as follows:

1. Stool specimens during acute stage, at least 3 separate specimens to be placed in special containers and kept in frozen state until delivery to the Laboratory.
2. Blood specimens (a) during acute stage, *not later* than 6 days after onset (b) convalescent specimen, taken 2 weeks after onset or when patient leaves hospital, whichever is earlier. *Refrigerate, but do not freeze.*
3. Clinical data sheet fully completed must accompany the specimens.
4. Containers for specimens are available at District State Health Offices as follows:

Central State Health District, 172 West State Street, (first floor) Trenton. Telephone: EXport 2-2131, Extensions 8423 or 319.

Metropolitan State Health District, 1060 Broad Street, Newark. Telephone Mitchell 2-7962, Extension 232.

Northern State Health District, 8 Prospect Street, Dover. Telephone 6-1197, or, if busy, Dover 6-2780.

County Administration Building, Hackensack. Telephone Diamond 2-4718.

Southern State Health District, 140 Haddon Avenue, Haddonfield. Phone 9-7550.

Transmission of specimens under refrigeration should be arranged for expeditious delivery to the State Laboratory at Trenton.

Authors' Clinic • • •

Numbers Game

Medical literature teems with numbers. You use numbers for dose, for time, for recovery rates. So here are some of our ground rules for saying it with numbers.

At the beginning of a sentence, a numeral (no matter how long) must be spelled out. You just do not start a sentence with a figure.

"Eighty-nine cases of otitis media were reviewed . . ." is correct. It would be wrong to start the sentence: "89 cases of otitis . . .—" This rule applies even when the opening item is a percentage. "Eighty per cent of the patients recovered," and never "80 per cent of the patients recovered." If this makes an awkward opening, rewrite the sentence. Thus "Nine thousand, two hundred and seventy-three patients have been examined since the clinic first opened in 1952" is admittedly hard to read. "9273 patients have been examined" is not permissible since no sentence may start with a figure. The solution? Write: "Since 1952 when the clinic first opened, 9276 patients have been examined." Notice that the form "Since the clinic first opened in 1952, 9276 patients—" is avoided because of the confusing juxtaposition of two sets of figures.

Small numbers are written out in the text, but represented as numerals in the tables. Editors draw the line at different places. Most of them spell out numerals up to and including ten. In THE JOURNAL of The Medical Society of New Jersey, we use figures for numbers above twenty. "In 28 cases" but "in eighteen cases." It is easier for an editor to cross out a word and write in a figure than for him to reverse the process. For that reason, when in doubt, spell out the quantity.

It is desirable to be consistent, and if in a series, some numbers are below twenty and some are larger, use the same form for all. Thus:

"Of the 85 patients, sixteen died and 69 recovered." This displays lack of consistency, though it does conform to the rule of spelling out numbers below twenty. In this special case, all three sets of numerals could be written in figure form.

In general, figures are preferred to words:

For dates: Write: April 12, not April Twelfth, not April Twelve, not April 12th.

For numbers larger than twenty.

For percentages. Write: 3 per cent rather than three per cent.

Before the abbreviations "a.m." and "p.m." (But if words like "o'clock," "hours," or "minutes" are used, spell out the number if it is under 21, as: "Four o'clock," "twenty minutes" or "three hours").

In tables and on graphs.

In footnotes, citations, and references to chapters or pages.

In expressing degrees of temperature. (However, in a phrase like "a rise of one degree," the numeral, if under 21, is spelled out).

In all other cases, the general rule applies: write out small numbers, use figures for large ones. This applies to fractions, too. Thus "two-thirds" but "21/1000."

Percentages. The symbol "%" is used in tables and sometimes on graphs, but never in text. It is written "per cent" (two words). Unless it starts a sentence, the number is written in figure form.

Roman numerals are used only (a) for apothecary doses, and (b) for references to the preface of a book in which roman numerals are so used by the publisher in the original. Journal volumes are always indicated in arabic numerals, even if the publisher uses roman numerals. For example, a British medical journal may indicate on the cover of an issue that this is "Volume XLVI." However, when referring to that issue, transcribe this to "volume 46."

HENRY A. DAVIDSON, M.D.

Announcements • • •

Occupational Medicine Course

A free course in occupational medicine is scheduled for Saturday mornings from 9 to 10 a.m., beginning on September 17, 1955. Sponsored by Columbia University, the course will be given at their medical college, 630 West 168 Street, New York City. The course covers industrial toxicology, nuclear physics, radiation hazards and hygiene problems associated with ventilation, lighting and noise.

Dermatology Essay Award

November 15 is the deadline for the prize essay contest sponsored by the American Dermatological Association. First prize is $500 and fourth prize is $200. The manuscript may cover any phase of dermatology or syphilology. For details, write to Dr. J. Lamar Callaway, Duke Hospital, Durham, North Carolina.

Tuberculosis Diagnostic Course

At Chamblee, Georgia, the U.S.P.H.S. offers an intensive, free-of-charge course in all aspects of the laboratory diagnosis of tuberculosis. The course is geared for both physicians and technicians. It runs full-time from November 14 to November 25. For more details write to Public Health Service, P. O. Box 185, Chamblee, Georgia.

Industrial Dermatology Course

Announcement is made of an intensive three-day course in industrial dermatology at the University of Cincinnati, October 10 to 14. This course includes actual field work in industrial plants. For details, write to Kettering Laboratory, Bethesda Avenue at Eden Street, Cincinnati 19, Ohio.

Geriatrics Fortnight

For the 28th time, the New York Academy of Medicine announces a "Graduate Fortnight." This year's theme is geriatrics. The fortnight starts on October 10 and runs for a fortnight. Registration fee is $10. For detailed program, write to Graduate Fortnight, Academy of Medicine, 2 East 103 St., New York 29, N. Y.

Award for Urology Paper

The American Urologic Association offers an annual award of $1000 (first prize of $500, second prize $300 and third prize $200) for essays on the result of some clinical or laboratory research in urology. Competition is limited to urologists who have been graduated not more than ten years, and to physicians training to become urologists. For particulars write to Mr. William P. Didusch, 1120 North Charles Street, Baltimore, Maryland. Essays must be in his hands before December 1, 1955.

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Book Reviews • • •

Many of the reviews in this section are prepared in cooperation with the Academy of Medicine of New Jersey.

The Fourth Congress of the International Society of Hematology. Edited by F. Jimenez deAsna, William Dameshek, Sol Haberman, Pp. 473, New York, Grune and Stratton, 1954. ($10.00)

Hematologists will like this compendium of recent advances in hematology. World famous physiologists and physicians have contributed articles. Although about half of the papers are written in Spanish, an English translation of the summaries is provided.

Dr. Houssay concludes that the hypophysis acts directly on the bone marrow *via* the growth hormone to stimulate red cell formation. The neuronal regulation of hematopoesis is well described by Sven Moeschlin.

In a beautifully illustrated paper E. deRobertis describes electron microscope studies of circulating blood cells. The highlight of this collection is an article by R. R. Race on blood groups and genetics. He enumerates 9 blood group systems and indicates how these can be applied to the study of genetics.

Practicing hematologists should be acquainted with the advanced status of hematology as described here. The book will be of less value to physicians who do not have a special interest in this field.

ROWLAND D. GOODMAN, M.D.

An Outline of the Treatment of Fractures. Prepared and published by the Committee on Trauma of the American College of Surgeons. Ed. 5. Chicago 1955. Pp. 91. ($1.00)

Fifty thousand doctors can't be wrong. Fifty thousand doctors have bought earlier editions of this slender manual of fracture care. It describes in explicit but laconic fashion exactly what to do about fractures anywhere in the body. Illustrations are clear though not profuse. The text discusses first aid, definitive treatment and long-range rehabilitation. It recites the basic principles behind fracture development and behind the healing mechanism. It is hard to imagine a better way to spend a lone dollar than to buy this little book. Any doctor, whether he limits himself to psychiatry or to administration, may someday have to render first-aid in a fracture case. He'll have to do that or lose a lot of face. If he has this miniature monograph in the pocket of his car he'll save a lot of face.

ULYSSES M. FRANK, M.D.

Reactions with Drug Therapy. By Harry L. Alexander, M.D. Pp. 301. Philadelphia, W. B. Saunders Co., 1955. ($7.50)

This practical little volume reviews the reactions encountered with the drugs commonly used today. In its first portion, the text considers the mechanisms and manifestations of hypersensitivity to drugs. Allergic principles are briefly discussed. There follows a description of the dermatologic expressions of drug hypersensitivity including contact dermatitis, urticaria and the exanthematic eruptions. Under each heading the author lists the common drug offenders. Systematic manifestations of drug hypersensitivity are next dealt with briefly. Included are blood dyscrasias, anaphylactic shock, serum sickness, bronchial asthma, hepatitis and periarteritis nodosa.

The second portion of the book considers the offending drugs, recounting the untoward reactions of each. Sulfonamides and antibiotics (particularly penicillin) are discussed in detail. Other chapters cover the anti-arthritic drugs, the drugs used in cardio-vascular disorders, sedative and anti-convulsant drugs, anti-thyroid drugs, antihistamines, serums and vaccines.

For those interested in reactions with drug therapy, a wealth of material is to be found in this little book, the value of which is enhanced by the excellent bibliography which follows each chapter.

WILFRED CARROL, M.D.

Parathyroid Glands and Metabolic Bone Disease; Selected Studies. By Fuller Albright, M.D. and Edward C. Reifenstein, Jr., M.D. Pp. 393. Baltimore, The Williams and Wilkins Company, 1955. ($8.00)

This highly scientific book is so well organized and presented, that one can read it with the enjoyment of reading a mystery novel with its plots and counterplots. Most of the book is devoted to diseases of the parathyroid glands.

Hyperparathyroidism is a comparatively rare disease, but there was no lack of clinical material in this field, because of the status of the authors and their associates.

The excellent facilities for laboratory studies of mineral metabolism in health, and disease, the ample clinical material and the highly trained research group headed by the authors, give this volume the quality of a text book on metabolic bone diseases.

Diseases of other endocrine glands, besides the parathyroids, cause disturbances in mineral metabolism. Thus, pituitary adenoma with acromegaly, adrenal adenoma or hyperplasia with Cushing's syndrome, gonadal deficiency with osteoporosis and diseases of the thyroid gland, all leave their special stamp on the mineral and carbohydrate metabolism of the organism. These disturbances are well described and illustrated in this book.

The authors give full credit to and discuss thoroughly the work of earlier investigators and a 20-page bibliography gives the reader easy access to the great volume of material discussed in this book.

RITA S. FINKLER, M.D.

Handbook for the Asthmatic. 16 pages, American Foundation for Allergic Diseases. New York. 1955. ($0.25)

If you treat asthmatics—this is for you—and your patients. It is distributed by the American Foundation for Allergic Diseases, a new national organization, founded by the American Academy of Allergy and the American College of Allergists. Some of the best brains from both organizations wrote this booklet. It is for the layman and in simple words it answers the questions: What is asthma? What causes asthma? What are some of the allergens? Why are some people allergic and others not? Is asthma psychosomatic? What is the function of allergy tests? What does your doctor want to know? How can I be desensitized against pollens, inhalants, foods? What can I do to prevent an asthma attack? What can the doctor do? What is the outlook for the asthmatic? What research is going on in allergy?

FRANK L. ROSEN, M.D.

Make Inferiorities and Superiorities Work for You. By Samuel Kahn, M.D. Pp. 184. Ossining, N. Y. 1955. Dynamic Psychological Society Press. Price not stated.

"Every child is born free of inferiorities." That's what it says here, right on page 22. The promise of this book is that "it will provide sound clues as to the handling of inferiorities . . . This work is intended to be realistic, practical and useful."

Of the book's 184 pages, only 5½ pages are in the chapter on treatment and handling of inferiorities. The "practical, realistic and useful" technics are such things as these: "a brief rest followed by recall of past successes . . . is usually sufficient to break down a temporary inferiority complex." Or: "mix with others . . . think less of self and more of others . . . set one's goal within reasonable limits . . . social contacts . . . music . . . charitable activities. . . " The freshness and crackling crispness of these tips are in line with the quality of the book as a whole.

HENRY A. DAVIDSON, M.D.

Christopher's Minor Surgery. Edited by Alton Oschner, M.D. 7th ed. Pp. 547. Philadelphia, Saunders, 1955. ($9.00)

Christopher's *Minor Surgery* has been recommended to medical students, surgical residents and general practitioners for more than a quarter of a century. The new editors, Drs. Oschner and DeBakey have collected a tremendous amount of new material written by 21 American authorities and have produced practically a new book. The text has one central idea: to discuss only those surgical conditions that can be treated in a doctor's office or in an out-patient clinic. The disorders affecting each system are grouped as injuries, infections, neoplasm and the like, so that information is readily available. The authors describe the etiology and pathology of the disorders and advise therapy. Wherever special technics are described they are illustrated in clear detail with 250 fine illustrations.

This book is highly recommended to medical students, surgical residents, general practitioners and surgeons. It is an up-to-date practical manual of office surgery and is an important addition to the vast field of minor surgery. It will serve best as a reference for minor procedures that could be performed in the office and in an out-patient department.

LEE SOLWORTH, M.D.

Doctor's Legacy: A Selection of Physician's Letters, 1721-1954. Edited by Laurence Farmer, M.D., Pp. 267, New York, Harper and Brothers, 1955. ($3.00)

This is a collection of physician's letters spanning two and a half centuries. It permits more than 80 identified and numerous anonymous doctors to express views on diverse topics related to the practice of medicine, their patients and themselves. The letters, written by distinguished as well as lesser-known physicians, constitute a vivid panorama, portraying professional progress projected against the changing medical scene since early in the eighteenth century.

Many of these letters hold special historical interest. Such letters, for example, as those of Jenner describing vaccination against smallpox, Laënnec on the invention of the stethoscope, Simpson on chloroform anesthesia, Lister on antisepsis using carbolic acid, Koch on culturing bacteria, Oliver Wendell Holmes on public acceptance of quackery, Thomas Huxley's comments on government interference in medicine, Freud's letter concerning his early studies of the psychoneuroses, Walter Reed's

account of the conquest of yellow fever, Osler's remarks on dying, Cushing's on retirement, letters describing combat medicine during World War II, and Alton Oschner's recent views on cigarette smoking.

By giving the background of the letter-writer, moreover, the editor places each letter in its proper historical context. Technically attractive, the volume concludes with a bibliography and an index.

In her foreword to *Doctor's Legacy*, Dr. Leona Baumgartner, Commissioner of Health for New York City, states, "The collection will interest the professional man and the layman, the historian and the sociologist, the biographer and the common reader—all who would like to learn something of the personalities and attitudes of men whose human and social insight has developed through the practice of the medical profession."

FRED B. ROGERS, M.D.

Early Care of Acute Soft Tissue Injuries. Prepared and published by the Committee on Trauma of the American College of Surgeons, Chicago 1955. Pp. 192. ($1.00)

A dollar doesn't buy much these days, but if you spend it on this soft-covered monograph you'll get a bargain. As crisp as good bacon, this little volume tells you in straight over-the-counter fashion what to do—and what not to do — about injuries of the abdomen, genito-urinary tracts, chest, face and neck. It discusses the treatment of burns and the management of vascular injuries. There are sensible chapters on head injuries, amputations, and eye injuries, and a useful discussion of first-aid. It is so compact, so useful and so inexpensive, that a copy should be available to every physician, nurse, factory infirmary, and first-aid man.

VICTOR HUBERMAN, M.D.

Auxiliary Report • • •

Essex

Mrs. Philip R. D'Ambola, president of the *Woman's Auxiliary to the Essex County Medical Society*, held her final Executive Board meeting at the Knoll Country Club in Boonton on May 10. Forty members were her guests at luncheon which preceded the meeting.

Mrs. D'Ambola terminated her official duties by presiding at a regular meeting and an annual meeting of the Auxiliary on May 23, at Mayfair Farms, West Orange. Dr. Frank S. Forte, immediate past president of the Essex County Medical Society, thanked the Auxiliary members for their cooperation and praised the women for the accomplishments of the past year. Dr. Jerome Kaufman, president of the Essex County Medical Society, extended best wishes and expressed the hope that the Auxiliary will continue its good work during the coming year. Dr. Joseph Clarken, advisor to the Auxiliary for the coming year, was absent because of illness.

Mrs. Frank S. Forte, in the absence of Mrs. Otto G. Matheke, Jr., introduced the Nurse Scholarship recipients to the Auxiliary. A corsage was presented to each girl.

Every Auxiliary member has received a copy of the revised Constitution and By-Laws along with a copy of the membership roster compiled during the past year.

Mrs. Thomas A. Messina and Mrs. Louis Covino conducted Memorial Services for the following deceased members: Mrs. John O'Sullivan, Mrs. Anthony Marchigiano and Mrs. Hunter Scott.

The following members were nominated and duly elected from the floor to serve on the Nominating Committee for the following year: Mrs. Samuel J. Pecora, Mrs. Alvin Mancusi-Ungaro, Mrs. Thomas A. Santoro and Mrs. Kenneth Gardner. Mrs. Irving Borsher was appointed chairman of the committee by Mrs. D'Ambola at the April meeting.

Annual committee reports were compiled in a booklet and distributed to all members present. Mrs. John McGuire was again responsible for designing the attractive cover. Appreciation and thanks go to Mrs. William Miningham, Jr. for typing the stencils; to the Essex County Medical Society and to the secretary, Mr. Arthur Ellenberger for the mimeographing; to Mrs. Joseph DiNorcia for compiling and stapling the booklets; to the following committee for compiling and proof-reading the reports: Mrs. Harry E. DiGiacomo, Mrs. Philip R. D'Ambola and Mrs. William Miningham, Jr.

After Mrs. D'Ambola read her annual report of achievements during the year 1954-55, Mrs. Stuart Hawkes presented her with the Past-President's pin, commending her for her work.

Mrs. John Torppey conducted the installation of officers by introducing the following:

President—Mrs. Ralph R. Autorino
President-elect—Mrs. Harry E. DiGiacomo
1st Vice-President—Mrs. William Miningham, Jr.
2nd Vice-President—Mrs. Thomas A. Messina
Recording Secretary—Mrs. Otto G. Matheke, Jr.
Treasurer—Mrs. Paul Aszody
Financial Secretary—Mrs. Don A. Epler
Directors—Mrs. Frank Bellucci and Mrs. Robert Citrino
Corresponding Secretary: Mrs. Charles O'Neill, Jr.

Mrs. Torppey read the duties of each officer and reminded them of their responsibilities.

MRS. THOMAS A. MESSINA
Chairman, Press and Publicity

TUBERCULOSIS *Abstracts*

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XXVIII August, 1955 No. 8

Emotional Problems in the Treatment of Tuberculosis

By Frank E. Coburn, M.D., Editorial, The American Review of Tuberculosis, February, 1955.

The fact that 35 to 50 per cent of patients with tuberculosis do not complete the residential treatment of their disease is striking evidence that something is awry with the handling of these patients. The treatment of the disease tuberculosis is tremendously improved but, if the emotional problems of the diseased people are improperly handled, they do not and cannot cooperate in the treatment. Not only are the advantages of the improved therapy lost, but these patients return to their communities to become sources of infection.

The two main contributions psychiatry can make in this situation are: a general attitude toward people with greater understanding of the role anxiety plays in shaping behavior; and techniques for finding out the patients' concerns so that they can be relieved.

The diagnosis of tuberculosis is inevitably an anxiety-producing situation for the patient, as it may also be for the physician. The physician knows about tuberculosis and what would be anxiety-producing to him if he found he had the disease. Therefore, in a conscious endeavor to relieve the patient's anxiety (but really probably to relieve his own), he is apt to attempt to reassure the patient about those things which would have made him anxious. This is futile, if not pernicious, as the patient's knowledge of tuberculosis and his personality are different from that of the physician, his personal problems are different. The anxiety the diagnosis produces in him is distinct and unique to him. It must be assumed that anxieties are produced in him, and then he must be induced to talk about them. To do this, we must remain silent at first. This increases the patient's anxiety to the point where he may ask questions. If he does not do so—after a few minutes of silence we may ask —what does this mean to you, or, how do you feel about this. This encourages him to talk. Rushing in with reassurance is avoided until the major part of his concerns is brought out, in order not to cut off discussion of them because they usually come last.

Reassurance must not go beyond our own certain knowledge. With the rapid changes in tuberculosis therapy, the length and method of treatment are uncertain; and the patient must not be given certainty when there is none. Setting of dates and duration of treatment is especially to be avoided, as if the time set is not fulfilled, it undermines his confidence in all the tuberculosis treatment team and results in diminished cooperation if not flight from therapy. The patient can be reassured that treatment has greatly improved and that he will be treated until he is well, although the exact time is uncertain.

In the sanatorium certain things are expected of the patient, although these may never have been analyzed from an emotional point of view. The patient is asked to give up his possibly hard-earned maturity. No longer is he to be the active, independent, giving parent or adult. He is to become passive, dependent, and receptive. He is to lie quietly, let others do things for him, and to do little or nothing for others. This is a tremendous change in his way of living, and the ease with which the patient makes this change depends upon his past history of dependency and maturity, his

personality structure, and his habitual techniques of relieving the anxiety to which we are all prey.

To some people, giving up of maturity and relaxing into dependency is regarded as a blessing. They have maintained or achieved their maturity with difficulty—or not at all—and it is a great relief to have nothing expected of them. These patients may appear to be "good" patients in the sanatorium, but the difficulties in rehabilitation are obvious. However, these patients may encounter difficulty in the sanatorium. Their continual dependent demanding may lead to rejection by the staff—so, at the same instant, regression to a childhood level is demanded and fault is found for doing so. Another type of patient has grown up despite his parents who tried to keep him immature and dependent. He has had to go through a rebellion at adolescence. Here is the sanatorium staff playing the parental role all over again. The patient is apt to react with his pattern of adolescent revolt, which leads to breaking of regulations or flight from the hospital. Another type of person has relieved his anxieties by action, whenever he has been upset. In a tuberculosis sanatorium, his anxieties are greatly increased by his fear of the disease, his concern about his family situation, and his economic helplessness. At the same time, his usual defense of activity is taken away. We think of the dangers of tuberculosis as being a stimulus to treatment cooperation but, if the anxiety of the patient under treatment is greater than that which he has about his disease, he may break off the treatment.

Some patients run into difficulty over the deprivation in the sexual sphere produced by the treatment situation. To some, it is a matter of relief of physical tension which, if not relieved, gives rise to anxiety, emotional tensions, and restlessness. Possibly more important is the emotional loss. To many people, sexual activity is the proof that they are fully loved by someone, and the loss of this only source of self-esteem produces too much emotional disturbance to be tolerated.

In the types cited above—and there are many more—understanding of the patient's emotional problems and the flexible adaptation of treatment to them is necessary if the patient is to rest or to complete his treatment.

The rehabilitation of patients after treatment is another area in which emotional factors are predominant. Here, in essence, we try to undo the regressed, immature, passive, receptive, and dependent role and ask the patient to become mature, independent, and productive again. Some difficulties can be alleviated by allowing the patient to maintain some maturity during the treatment. By presenting him with alternatives in planning his treatment, the support of his family, et cetera, we may nurture his self-esteem, and the feeling that he can direct his own affairs. The amount of problem left at the time of rehabilitation depends on the personality of the patient, his degree of maturity before becoming ill, the degree of regression in the hospital, his methods of handling anxiety, the amount of tension and acceptance at home, residual symptoms, and the fears of recurrence. Thus, in the diagnosis, the treatment, and the rehabilitation of people suffering from tuberculosis, emotional factors are of paramount importance.

The major technic psychiatrists have to offer is simple in words—Get the patient to talk about himself. Most people enjoy the opportunity but may avoid the significantly disturbing areas. We must learn to listen quietly, sympathetically, and never by word, sigh, or gesture expresse condemnation of the patient. If we do, he just won't talk to us. He may tell us things which are unacceptable to our moral standards. It is not our job to re-make his character but to treat his tuberculosis. Patients may talk a little and then stop. Here a nudging technique is needed; a simple "and then" may start him off again. Or repeating his last phrase, or asking "How do you feel about that?" In all of these, it is to be noted that no new ideas have been introduced but the opportunity to talk was given. These techniques are equally applicable to case finding, medical management, and to rehabilitation.

The goal is a patient who understands his disease, who accepts a treatment which does not violate his personality, and who returns to the community as a mature, responsible, productive adult.

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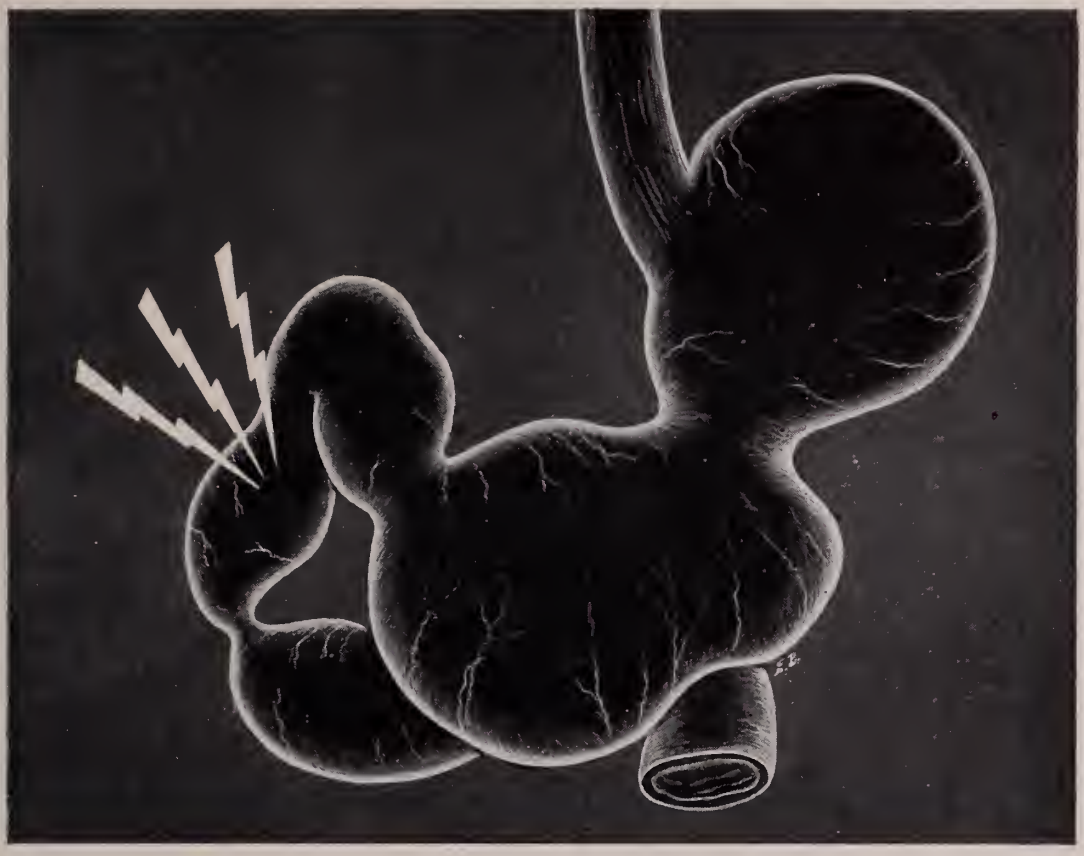

Abnormal Motility as the Cause of Ulcer Pain

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Present investigations[1,2] on the relationship of acidity and muscular activity to ulcer pain have led to the following concept of its etiologic factor:

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1. Schwartz, I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: A Clinical Evaluation of a New Anticholinergic Drug, Pro-Banthine, Gastroenterology *25*:416 (Nov.) 1953.

2. Ruffin, J. M.; Baylin, G. J.; Legerton, C. W., Jr., and Texter, E. C., Jr.: Mechanism of Pain in Peptic Ulcer, Gastroenterology *23*:252 (Feb.) 1953.

SEARLE

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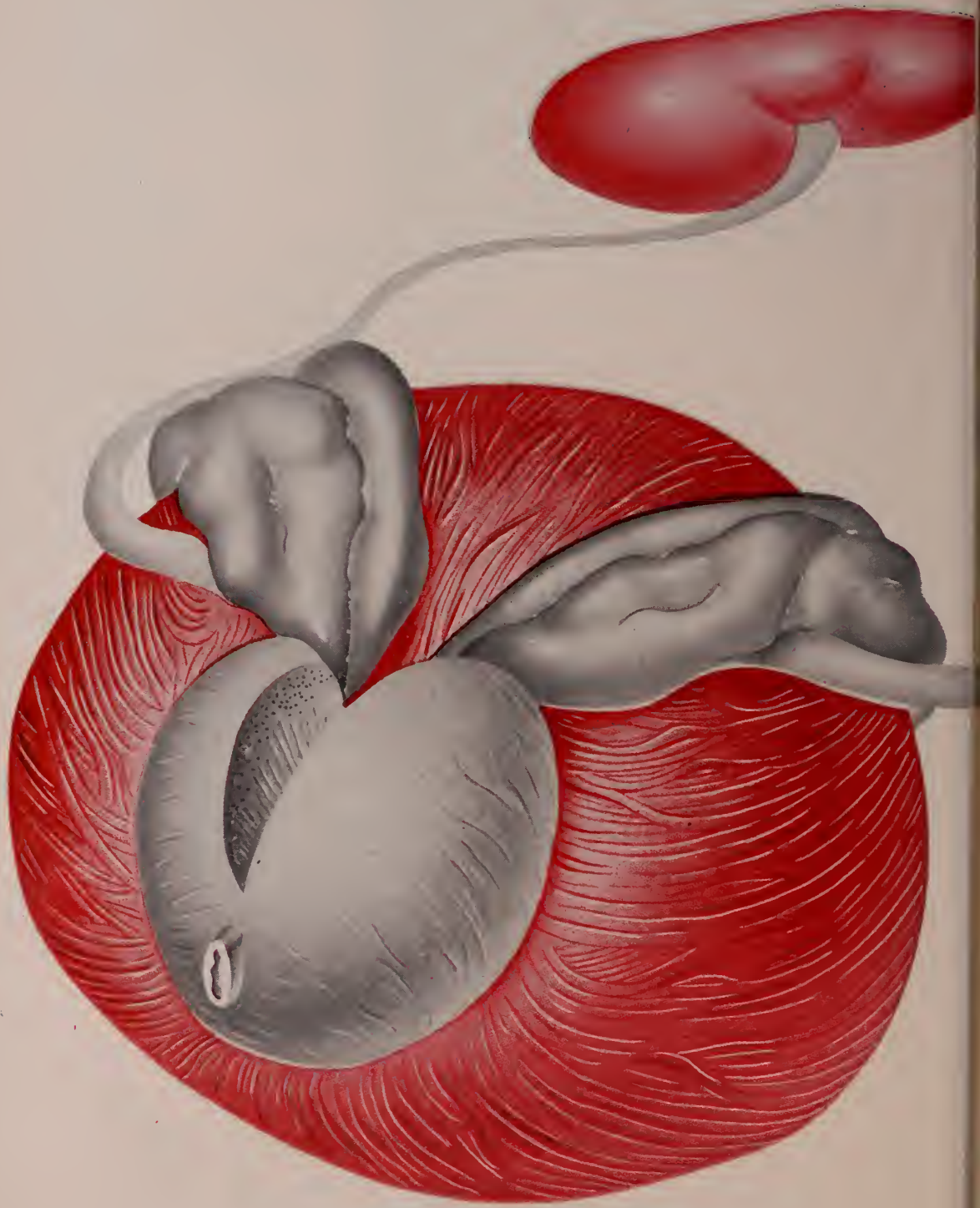

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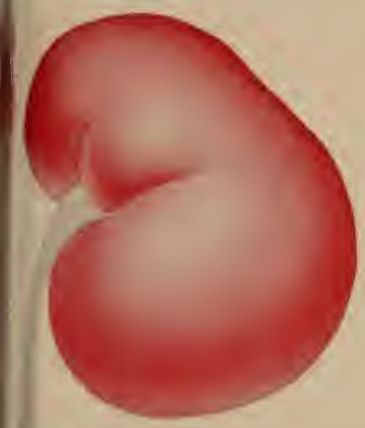

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References (1) Jones, C. P.; Carter, B.; Thomas, W. L., & Creadick, R. N.: *Obst. & Gynec.* 5:365, 1955. (2) Balch, H. H.: Mil. Surgeon 115:419, 1954. (3) Altemeier, W. A.; Culbertson, W. R.; Sherman, R.; Cole, W., & Elstun, W.: *J.A.M.A.* 157:305, 1955. (4) Kutscher, A. H.; Sequin, L.; Lewis, S.; Firo, J. D.; Zegarelli, E. V.; Rankow, R., & Segall, R.: *Antibiotics & Chemotherapy* 4:1023, 1954. (5) Clapper, W. E.; Wood, D. C., & Burdette, R. I.: *Antibiotics & Chemotherapy* 4:978, 1954. (6) Sanford, J. P.; Favour, C. B.; Harrison, J. H., & Mao, F. H.: *New England J. Med.* 251:810, 1954. (7) Sanford, J. P.; Favour, C. B., & Mao, F. H.: *J. Lab. & Clin. Med.* 45:540, 1955. (8) Felshin, G.: *J. Am. M. Women's A.* 10:51, 1955.

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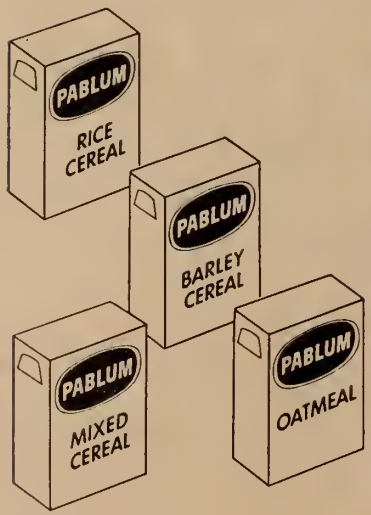

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THE JOURNAL

OF

THE MEDICAL SOCIETY OF NEW JERSEY

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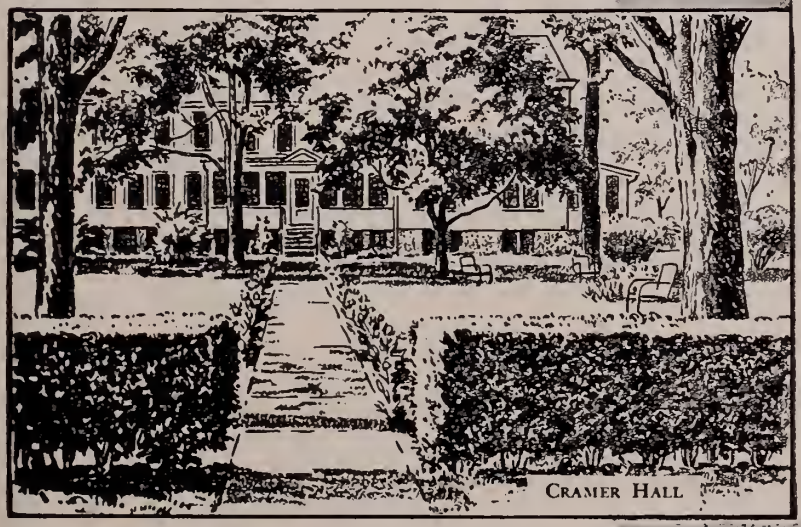
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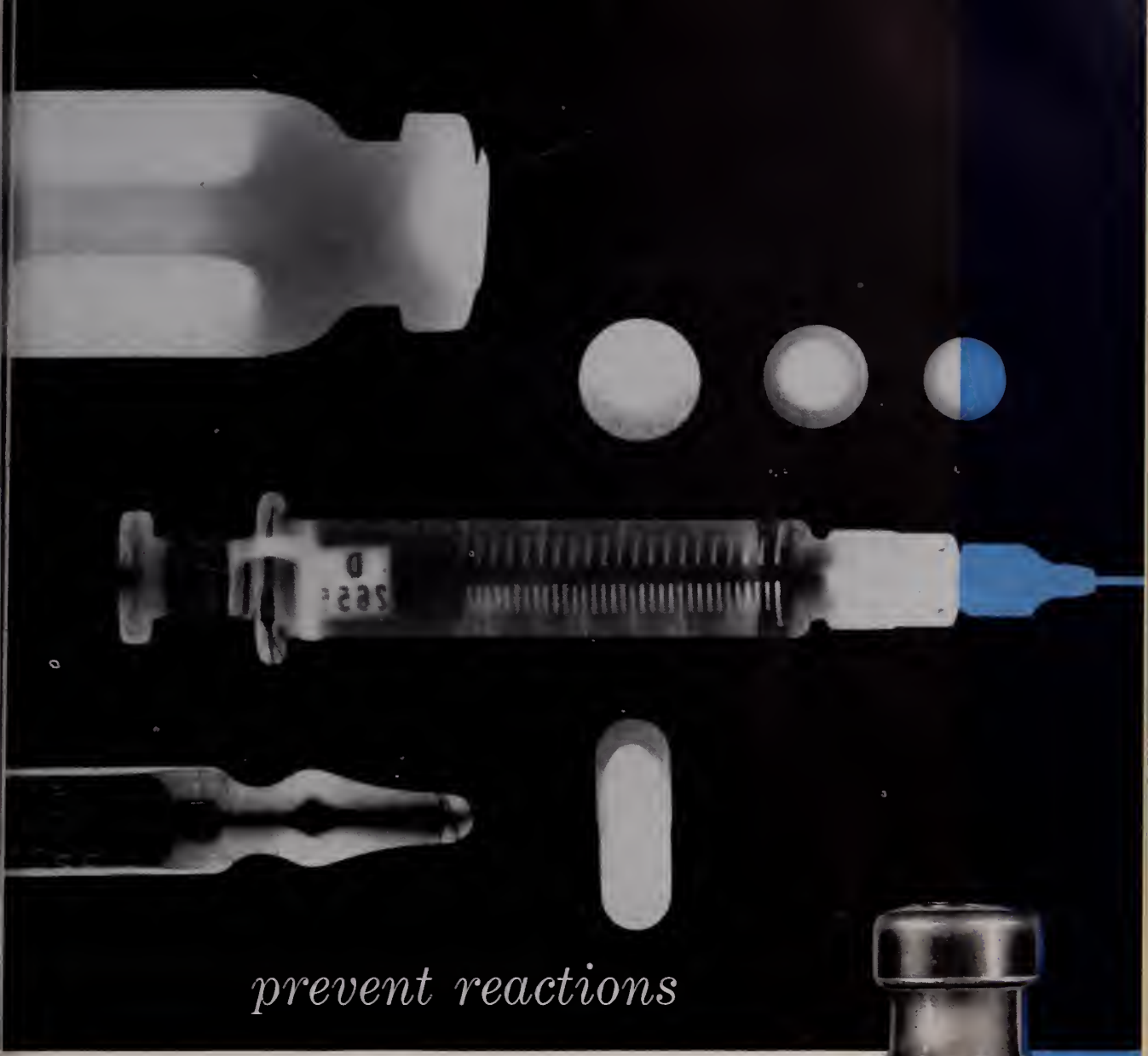

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and Biologic Facts of Protein Metabolism

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In undernourished subjects the maintenance requirement for each essential amino acid is much greater—two to almost five times greater—than in healthy subjects.

Although an optimal caloric intake facilitates optimal utilization of amino acids, a reducing regimen need not curtail full utilization of these nutrients. It has been shown that a useful degree of amino acid utilization can be attained with caloric intake considerably below the optimal.

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*Cannon, P. R.; Frazier, L. E., and Hughes, R. H.: Factors Influencing Amino Acid Utilization in Tissue Protein Synthesis, in Symposium on Protein Metabolism, New York, The National Vitamin Foundation, Inc., 1954, pp. 55-90.

The nutritional statements made in this advertisement have been reviewed and found consistent with current medical opinion by the Council on Foods and Nutrition of the American Medical Association.

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1. Winsor, T., and Humphreys, P.: Angiology *3*:1 (Feb.) 1952. 2. Plotz, M.: New York State J. Med. *52*:2012 (Aug. 15) 1952. 3. Dailheu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.

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(1) Payne, R. W.; Shetlar, M. R.; Farr, C. H.; Hellbaum, A. A., and Ishmael, W. K.: J. Lab. & Clin. Med. 45:331, 1955. (2) Bunim, J. J.; Williams, R. R., and Black, R. L.: J. Chron. Dis. 1:168, 1955. (3) Halbrook, W. P.: M. Clin. North America 39:405, 1955.

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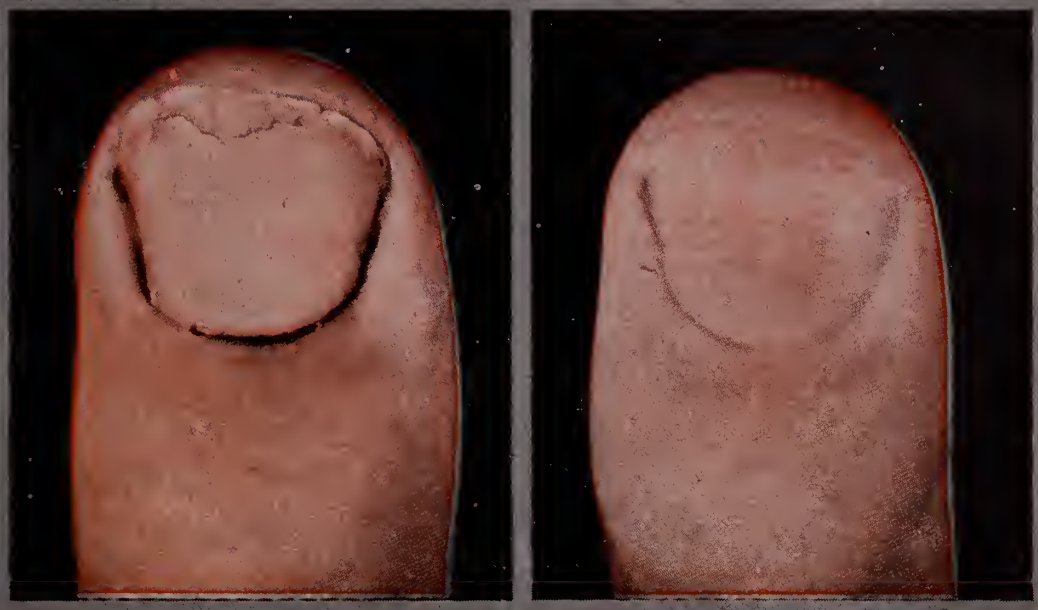

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1. Rosenberg, S. and Oster, K. A., "Gelatine in the Treatment of Brittle Nails," *Conn. State Med. J.* **19**:171-179, March 1955.
2. Tyson, T. L., *J. Invest. Dermat.* **14**:323, May 1950.

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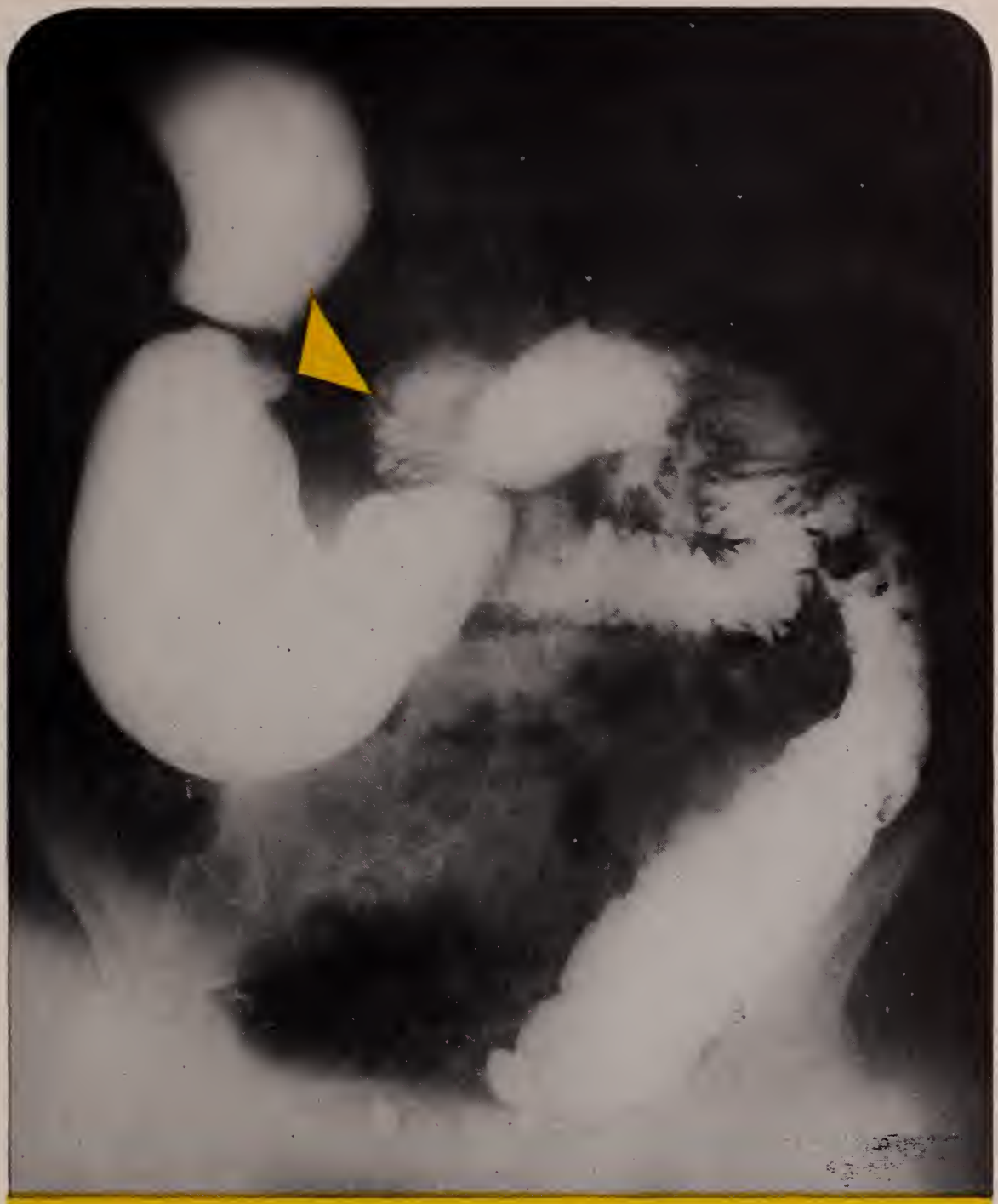

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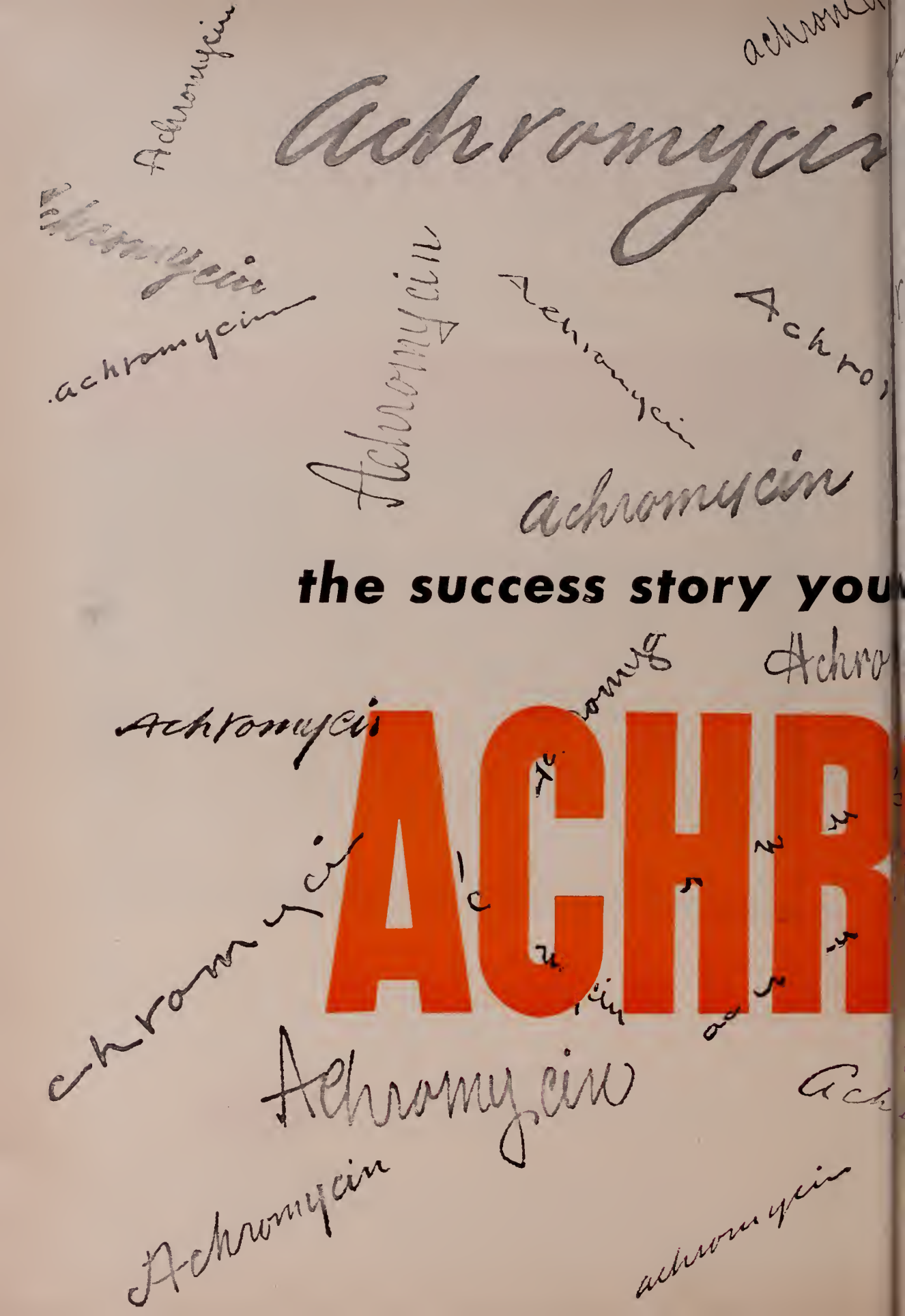
REFERENCE: 1. Robinson, R. C. V., *J.A.M.A.* 157:1300, April 9, 1955.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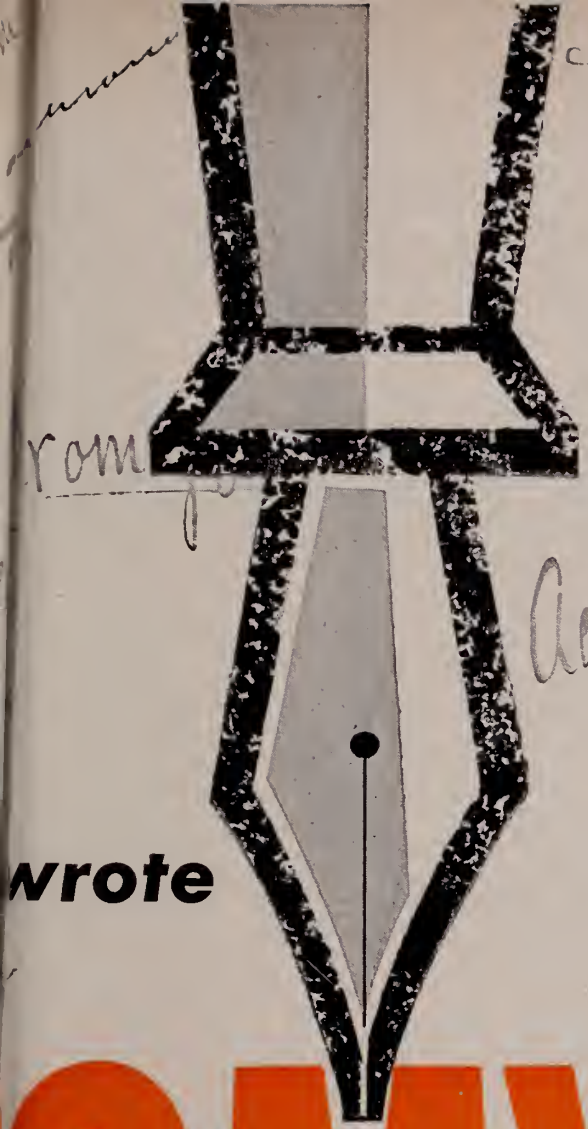

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1. Pomeranze, J. et al.: Angiology, June, 1955.
2. Freedman, L.: Angiology 6:52, Feb. 1955.

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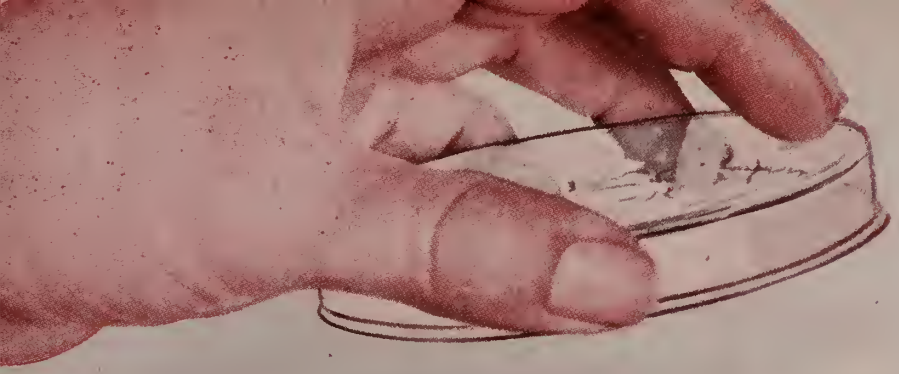

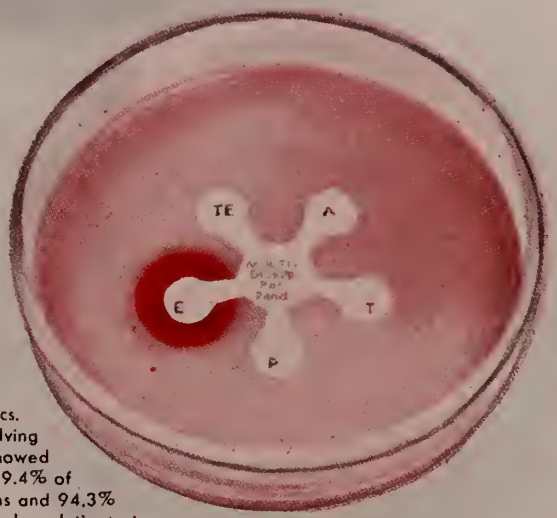

DESTROYS ENTEROCOCCI

This blood agar plate shows a strain of *beta* hemolytic enterococcus. Note extreme sensitivity of this organism to ERYTHROCIN—yet it easily resists the other antibiotics. Additional data: A study[1] involving 202 enterococcic strains showed sensitivity to erythromycin in 99.4% of *alpha* hemolytic strains and 94.3% of *beta* hemolytic strains.

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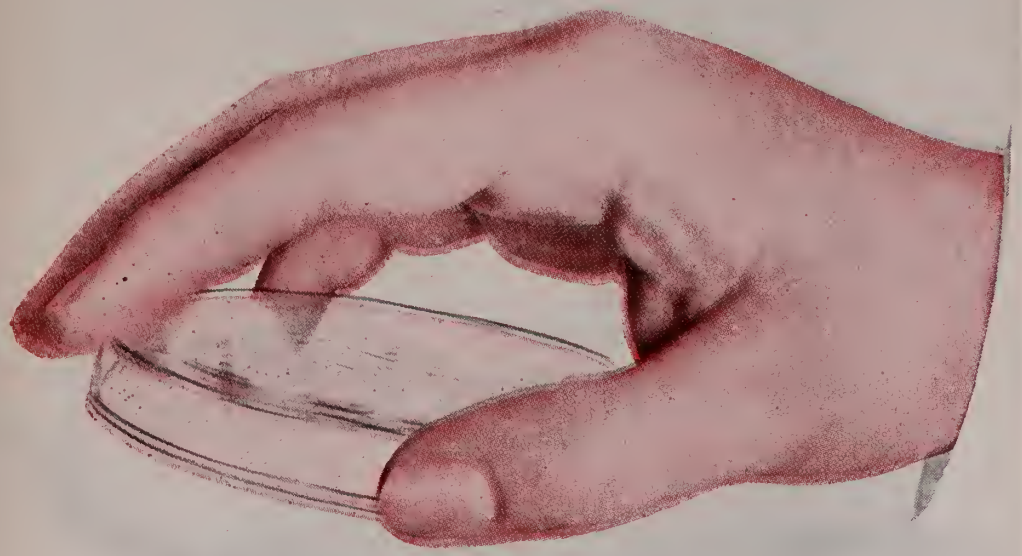

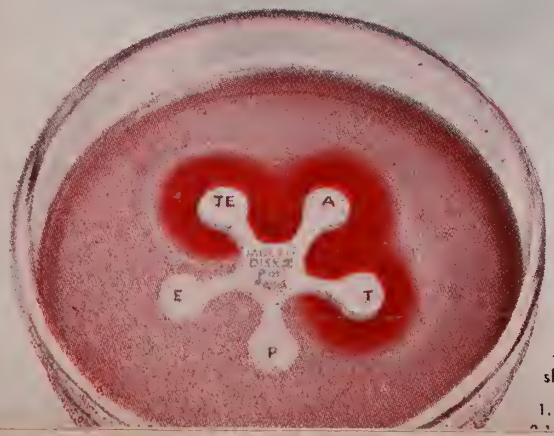

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This sensitivity test shows ERYTHROCIN and the same antibiotics against a typical intestinal strain of *E. coli*. Note that ERYTHROCIN and penicillin do not affect this gram-negative organism —although the other antibiotics show marked inhibitory action.

1. Eisenberg, et al., Antib. & Chemo.,

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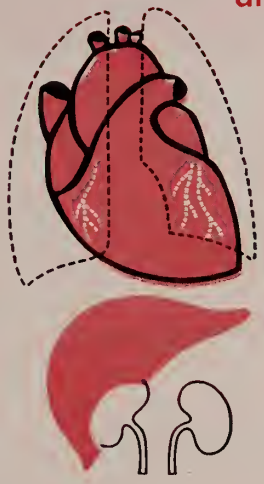

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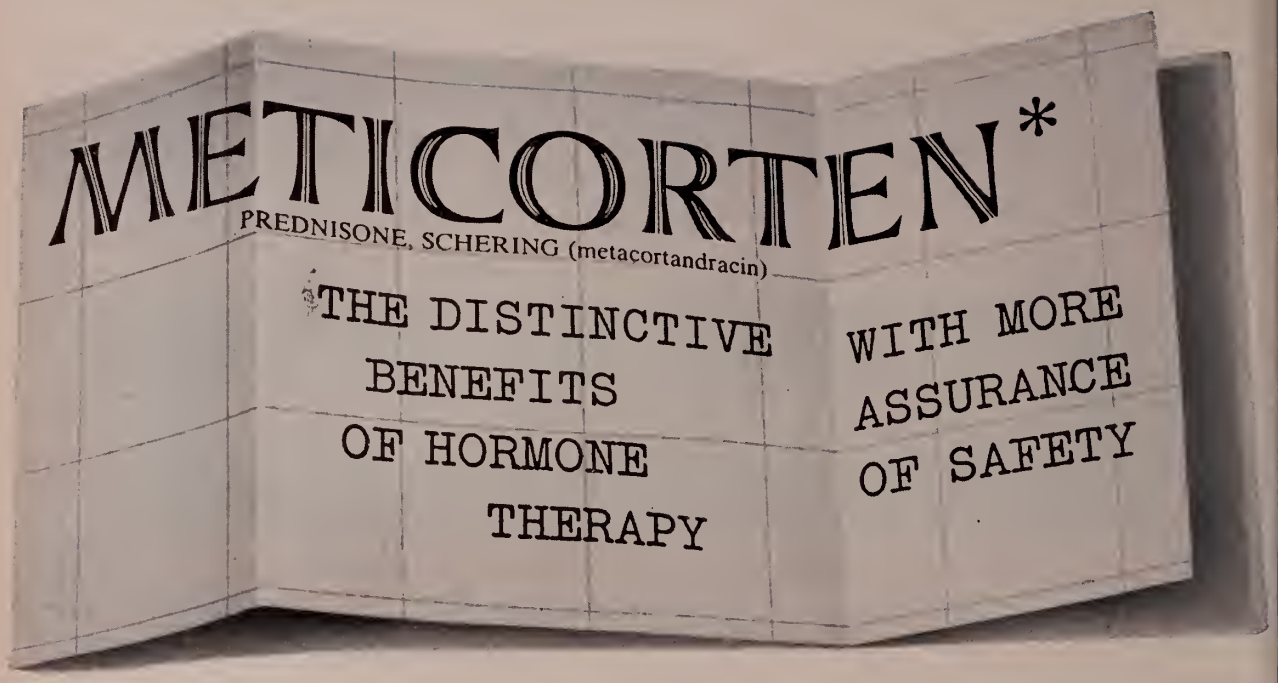

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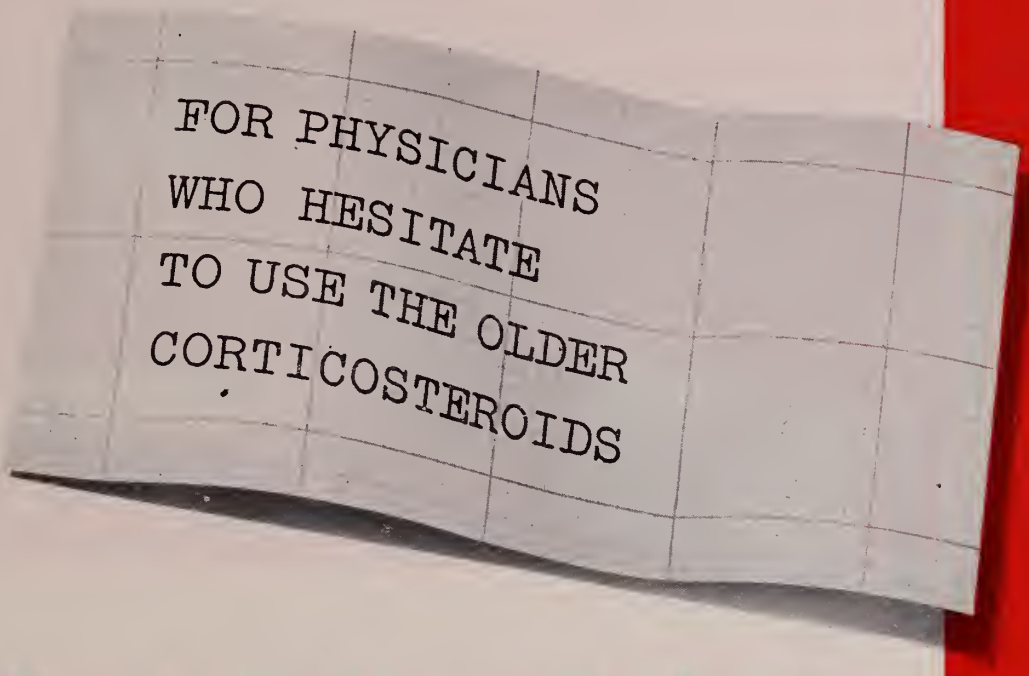

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Editorials • • •

Who Are The Most Patient Patients?

Men may make the best husbands, but according to some researchers, women make the best patients. Ask any nurse. Being, by nature, suspicious of women, and preferring—also by nature—the company of men, the average woman nurse might be expected to prefer male patients just as other women workers prefer male bosses and male customers. But, though they say it reluctantly, they join their sisters in asserting that in a sick-bed, a man is just a little boy grown-up. Not so grown up, either. In their patient rating scale, males apparently don't rate so well.

The real test of a patient's patience, however, is the dental chair. Here a patient, no matter how calm he pretends to be, signals his tension by slight psychomotor movements which the dentist can detect. And, according to a dental survey made, appropriately, by *Dental Survey*,* women make better dental patients than men. As a matter of fact they also take better care of their teeth generally. It seems that in pre-adolescence, little boys consider any type of washing—whether in the mouth or behind the ears—a feminine frill. Worse than that, they believe that a defiance of mother's instructions to wash the teeth, is a symbol of manliness. Then through certain psychiatric mechanisms, not to be disclosed in this family periodical, the growing boy carries this low opinion of dental hygiene right into adult life. The adolescent may slick down his hair and clean his finger-nails while preparing for a date; but he apparently feels no need for washing in places where the fruit of his industry is not so visible. To the girl, on the other hand, cleanliness and body care seem to be basic virtues. All of which may account for the fact that women *are* better patients than men. Or are they?

*Dental Survey 31:180 (February 1955)

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Mail Order Medicine

One way of turning over a fast buck is to establish a mail order medical service. The post-office does its best to put out of business every mail-order fraud it can prove. But because of the general presumption of innocence, the burden of proof is on the complainant. Furthermore, victims are loath to admit that they have been guyed.

Most of us know about epilepsy cures sent through the mail. There is also, in Chicago, a mail order "analytic bureau" which will send you a urine analysis every three months at the bargain price of $12 a year. A letter from the A.M.A.'s Bureau of Investigation reveals that, two years ago, a subscriber sent to the agency, a salt solution colored to resemble urine. He received a report indicating that the sample contained uric acid and squamous epithelial cells. When the client protested he got his money back, but the "bureau" is still in business.

Glance through the pages of magazines addressed to the less literate fragments of the public. You will see advertisements of trusses, eye-glasses, sedatives, stimulants, vitamins, aphrodisiacs, massage equipment, denture glue, hay-fever alleviators, "analytical laboratories," hemorrhoid therapies, psoriasis cures, and the like. It is hard for the physician to shout too loudly against these, for when he does, the average retort is likely to be that the doctor is worried about "competition." Thus, it costs $20 to $25 to have a neurologic examination and perhaps $15 for every re-visit. But if the patient has "spells," he can be "taken care of" at only $3 for a month's supply of "fit-control medicine." You and I know the hazards, but somehow we have failed to communicate them to the less sophisticated part of the public.

Don't say: there ought to be a law. There *is* a law. To enforce it however, the authorities need names, dates, documents and complainants who are willing to take an oath.

Medical School Myths

Modern methods of communication make possible the rapid spread of mythology. Error, like truth, has taken to wings. In our field of interest, for example, there have been developed several myths about medical schools. Thus it is alleged that the A.M.A. practices a rigorous birth control when it comes to the development of new medical schools; that only A students can get in to medical schools; that medical student enrollment has not kept pace with rising population figures; that most applicants get turned down.

Since 1910, our population has upped 76 per cent (from 92 to 162 million). Physicians graduated from approved medical schools have sky-rocketed 117 per cent (3165 in 1910; but 6861 in 1955). If the A.M.A. or any other organization is exercising birth control here, that job is a pretty poor one!

The myth about trouble getting into medical schools has developed out of this kind of statistic: In the 1953-4 year there were about 50 thousand applications to medical school, but only about 7500 admissions. So, on the face of it, the chance of admission would seem to be one in six. But the 50 thousand applications represented 14,700 different persons. Since 7500 were admitted, the chance of getting in is better than 50-50. Only 21 per cent of accepted applicants had "A" averages, so apparently the medical schools are not looking for a cerebral aristocracy.

Five completely new medical schools have developed since World War II. In 1910 there were only 66 approved medical schools; in 1954 there were 80, an increment of 21 per cent in three decades.

Sure, it is harder to get into a medical school than into Arthur Murray's. But who would have it any other way?

William Nyiri, M.D.
Newark

Insulin in Clinical Medicine*

In this veritable monograph on modern insulin usage, Dr. Nyiri gives every practitioner a practical guide to this potent life-saving drug.

The discovery of insulin in 1921 was the result of the brilliant scientific work of Banting and Best.[17] The isolation of this hormone produced by the Beta cells in the island of Langerhans, not only allowed a fundamental change in the practical management of diabetes, but reduced the death rate of this illness drastically. It permits diabetic children (nearly all of whom would have died) to reach maturity in good condition. It prolongs the life of the average diabetic to about the span of a healthy human being.

The purpose of this presentation is to give a brief summary of the uses of insulin in clinical medicine, in the light of modern knowledge. How keen the interest of the medical and allied professions became in insulin and how intensively and extensively this hormone was investigated experimentally and clinically during the last 33 years, an array of nearly 25,000 scientific publications,[18] gives impressive testimony. In the basic issues of the administration of insulin there is complete agreement among the members of the profession. However, there are differences of opinion in many details. I had the opportunity to study the subject intensively on the metabolic services of the Newark City Hospital, the Newark City Dispensary and in my private practice during a period of about 28 years, with a diabetic case material of over 5,000 patients. That makes it possible to add to this review some of my own observations.

The daily insulin requirement for the maintenance of normal metabolism and good health is unknown. The likeliest figures are 100 to 150 units in 24 hours. However, in depancreatized men, less than 50 units per day have been found necessary to maintain a normal glycemia, reflecting the complex pluriglandular influence on insulin production and utilization. There is no quantitative information available regarding the daily insulin production in nondiabetics. Hence we cannot follow any definite standard to go by in the care of our diabetics. We adjust by trial and error the required dose in the individual patient.

The action of insulin in the identical dose on the same individual may vary under changing circumstances. It will be intensified by physical exercise, by a too low-caloric regimen, by low glycogen reserve (as exemplified by recovery from infections or toxemias) and by cachectic diseases, particularly malignant neoplasms; also in those endocrine disturbances in which the production of hormones antagonistic to insulin is diminished or abolished (Simmond's disease, Addison's disease and hypothyroidism). On the other hand we may observe a diminished insulin effect in patients on

*Read before the Section on Metabolism, 189th Annual Meeting of The Medical Society of New Jersey, April 20, 1955.

high-caloric diets, obesity, during infections and toxemias and cases with excessive function of the anterior pituitary, thyroid and adrenal glands (Cushing's syndrome, hyperthyroidism and active tumors of the adrenal cortex).[20]

Only about 40 to 50 per cent of diabetics require supplementary exogenous insulin. The remaining cases are mild enough or stout enough to be kept under control on more or less restricted diets alone.[15,16]

According to their respective actions the commercially available insulins divide into two groups: short and long duration.

THE original insulin, as discovered by Banting and Best,[17] (also called regular or unmodified insulin) as well as the crystalline zinc insulin[27] ought to be restricted to acute complications of diabetes, where carbohydrate tolerance and insulin requirement often vary rather abruptly. Here the short-acting insulin will permit a quicker and more frequent adjustment of subsequent dosage. We also like to give regular insulin to those patients who come into our observation for the first time. For the initial period, until the individual peculiarities of response to the treatment have been studied, the regular insulin allows more flexibility. As a rule, one can switch these patients safely to longer acting insulins after the first few days.

The larger proportion of uncomplicated diabetics requiring insulin will do well on one daily dose of protamine zinc insulin,[28] whether it is administered before breakfast, as is customary in most cases or at bedtime; provided the distribution of the carbohydrates in the patient's diet is adapted to the blood sugar curve, as created by the prolonged insulin effect. The more severe diabetic, however, on such a regimen will have a more or less substantial postprandial glycosuria. He will require additional insulin. An increase in the dose of protamine zinc insulin would create nocturnal or early morning hypoglycemia. Therefore supplementary regular insulin is needed. Some patients respond well by supplementing the basic protamine zinc insulin in the morning with a simultaneous dose or regular insulin (10 to 20 units) in a separate injection. This works if the duration of the action of the protamine zinc insulin is less than 24 hours and therefore does not extend into the next forenoon.

Few instances are encountered in which the protamine zinc insulin effect is too short for one daily injection. The best management in these patients is to give the protamine zinc insulin in two doses: a larger one before breakfast and a smaller one at bed time. The administration of protamine zinc insulin at bedtime in one single dose per day instead of the morning is also indicated in rare cases, in which the initial absorption of the insulin is delayed beyond the customary time, but the overall effect extends to nearly 24 hours. In these instances the "night insulin" acts more like a "day insulin" because its main effect takes place from the morning to the evening of the next day.

IN certain patients, protamine zinc insulin has two shortcomings: it does not always combat postprandial glycosuria; and it may become cumulative due to its action in excess of 24 hours. It was, therefore, a step in the right direction, when globin insulin with its intermediary action became available.[29] I used globin insulin rather extensively in the first years after its discovery. Some of my cases—the less sensitive ones—showed very good control on doses from 25 to 50 units per day administered before breakfast. Unfortunately, quite a few of the patients on this insulin presented too steep a drop of the blood sugar in the afternoon hours, especially between 3 and 6 o'clock. Rather severe insulin reactions resulted. Such reactions occurred in sensitive patients repeatedly, in spite of all attempts to prevent them with heavy carbohydrate administration at lunch and particularly during afternoon hours preceding the time of the previously observed hypoglycemia. Because of these incidents, I abandoned the use of globin insulin almost completely and at present have only two patients successfully and continuously on this product. For nearly twelve years, these two diabetics have been on a daily dose of 30 and 45 units, with diets of about 180 Grams

of carbohydrates a day. Neither patient has ever had a hypoglycemic reaction.

Far better are the experiences with the mixtures of regular and protamine zinc insulin.[30] The most widely used "insulin mixture" is the 2:1 ratio in favor of regular insulin. It gives a response comparable to globin insulin, but the blood sugar lowering action is not nearly as steep as that of the latter. The 2:1 mixture gives excellent results in about 5 to 10 per cent of the diabetics, in need of insulin.

Other patients requiring insulin of intermediary effect, do better on mixtures of a different ratio, especially 2½:1 and even 3:1 in favor of the regular insulin. The term "tailor-made insulin" has been coined to indicate the flexibility with which ratios may be adapted to the varying requirements of individual hard-to-control cases.

Of all insulins with intermediary action, NPH insulin (isophane insulin)[31,32] is perhaps the best. It has an effect close to that of the 2:1 mixture, being essentially a "postprandial insulin," without too excessive late afternoon hypoglycemic results. Most diabetics without acute complications are well controlled on NPH insulin. In recent years, *ceteris paribus*, it has become the preparation of choice. NPH insulin and regular insulin may be administered mixed in one syringe without modifying each other's action. This mixture benefits those patients who require a reinforced hormone effect for the forenoon.

Very similar to NPH insulin is the action of the new "lente" insulin.[33] By virtue of its purity it proved to be of special value in the treatment of insulin allergy. It is a fascinating agent and may lead to future practical therapeutic improvements; for the present, however, its performance is not superior to that of NPH insulin.

An afternoon snack of carbohydrates is in order as a precautionary measure in all those cases which are kept on any of the intermediary insulins. Of equal importance is the administration of a sizable carbohydrate bedtime snack in all cases using longer acting insulins. Omission of this basic step may lead to dangerous hypoglycemias in the early morning hours during the patient's sleep.

Comparing the strength of the effect of the short- and long-acting insulins, one observes that in small doses (10 to 20 units) the overall result is stronger with regular insulin; therefore per unit, one accomplishes more by using the unmodified preparation. On the other hand, when in need of high doses, one will find that protamine zinc insulin exerts a stronger effect per unit and therefore will have an insulin-saving action. It is not unusual to see that switching from a dose as high as 60 to 80 units per day of regular insulin, at least 15 to 20 fewer units of protamine zinc insulin can be given.

One of the difficulties with insulin-treated diabetics, who are being sent home from the hospital, is the different routine of living in the home. The three main meals in the average hospital are much closer together than in the home. Furthermore, most patients are sedentary in the hospital, but become active after return home. For these reasons, it is wise to reduce the insulin dosage by 10 to 20 per cent on discharging patients from the hospital.

Mention must be made of the particularly sensitive diabetics; of patients who are frequently referred to as "brittle" diabetics.[34] Many are high-strung, anxious individuals of good intelligence and an unstable autonomic nervous system. While the average patient requiring insulin may reach control by various therapeutic approaches, the "brittle" diabetic will offer difficulties no matter what method of treatment is being attempted and regardless of the skill of the physician.

It appears to me that the varying experiences with these labile cases are perhaps responsible for some differences of opinion in the treatment of diabetes.

A few exceptional diabetics also have been reliably observed who display a "paradoxical hyperglycemia" after insulin administration.[35] This perplexing phenomenon may become manifest, regardless of the type of insulin used and thus far has not been satisfactorily explained. In elderly patients it should not be

difficult to control it but in juvenile diabetics, it could become a serious problem.

Insulin is not 100 per cent advantageous. Its most serious shortcoming is the insulin reaction.[33] Only hypoglycemia caused by exogenous insulin is considered in this presentation. The symptoms as well as the differences in the manifestations of reactions between short and longer acting insulins are too well known to be spelled out here. One special problem, though, ought to be mentioned: a difficulty in the management of reactions arising from long acting insulins. Our patients do not appreciate sufficiently the frequent recurrence of hypoglycemic symptoms within short intervals in spite of carbohydrate ingestion. We urge these patients to take fast-acting sugars as well as carbohydrates with slow and prolonged resorption for this emergency. Aside from the physical dangers of insulin reactions the emotional aspects with their possible social implications are worrisome subjects.

THERE is no strict parallelism between the severity of reactions and the low figures of the blood sugar values.[37] Cases have been reported when in spite of values of practically zero per cent blood sugar, no symptoms of insulin reactions were observed.[38] On the other hand, there are reports of insulin reactions with blood sugars ranging from 100 to as high as 200. I have seen such cases in the heroic treatment of acidosis. They had very high blood sugar values to start with (400 to 600), received 100 units of regular insulin in one injection and as a consequence had a steep fall of blood sugar within a very short time.

The syndrome known as insulin reaction, may be brought about in two ways: (1) by the absolute low value of dextrose in the blood, (2) by a sudden steep drop of a high blood sugar, long before hypoglycemic values are reached.

Few deaths have been reported as a direct consequence of hypoglycemia.[11] Pathologic changes in the central nervous system were found in cases where the hypoglycemia was present untreated for longer periods of time (many hours).[39] Successful, deliberate suicides are cited in literature.[40]

Another occasional difficulty, more puzzling than worrisome, is insulin resistance. Its most frequent causes are acidosis and infections. Curiously, not every infection requires higher insulin dosage. Destructive processes of the pancreas and disturbed liver function appear to be related to it at times. It stands to reason that hyperactive pituitary, adrenal or thyroid glands may bring it on. There are, however, cases [41] where, so far, no tangible causes have been found for this abnormality. Permanent insulin resistance is extremely rare (in my own material I have never seen it) but in an occasional case the temporary disturbance may last as long as 2 to 4 years.

Allergic reactions after insulin injections are not infrequent,[42-44] but allergy to the insulin molecule as such is rare indeed. Even though protamine—a protein of rather small molecular weight—does not create allergy, it seems to enhance the allergenic properties of insulin in susceptible individuals. Globin does not exert a similar effect. Many reactions are charged to impurities in the commercially available insulin preparations as the successful use of recrystallized products prove.[45] Fortunately, most of the allergic manifestations of the skin occur at the beginning of the treatments and are mild and transitory. If the symptoms do not vanish gradually by themselves, oral antihistaminics will hasten their disappearance.

AMONG the longer acting commercial products the new "insulin lente" deserves preference in sensitive individuals; its purity and freedom from absorption-retarding proteins make it eminently suitable to avoid allergy. In the treatment of allergy to the unmodified insulin the change from one animal source to another frequently brings success. Fortunately, true anaphylactic reactions to insulin are extremely rare; we have not seen this dreaded occurrence in our long experience.

The least significant disadvantage of insulin administration is lipodystrophy,[35,42,44,46] either in the form of hypertrophic fat deposits hypodermally or the more commonly observed fat atrophies, leaving the skin at the site of the injections sunken, uneven. Preservatives, im-

purities, androgen insufficiency and mechanical trauma, particularly the low temperature of the injected fluid have been blamed for these harmless by-effects. Lipodystrophy is regretable merely because of its cosmetic result. With few exceptions, its signs will gradually disappear when the patients systematically rotate the location of injections.[11,47]

The chain of abnormal metabolic events in ketosis and coma [48] and its "routine" treatment (if such a term may be applied at all to the diversified circumstances of acidosis cases) are well known. The amount of insulin required may vary from 200 to several thousand units depending on the severity and duration of the ketosis as well as the presence or absence of a precipitating, concomitant disease.[49]

Reversibility of the perverted metabolism in coma frequently hinges on its duration. Treatment with insulin and infusions has to begin at the earliest possible instant. Success often depends more on the quick start of the corrective measures, than on the initial dose of insulin and speed of infusion. Thus (contrary to general hospital routine) the treatment should be launched in the receiving room or admitting office. The time needed for administrative purposes and transportation to the hospital bed should not be lost. We deal with an exquisitely acute emergency which matches, if not surpasses, the most acute surgical case. The waste of a few minutes may turn the tide.

Insulin should be given hypodermally only except in a very deep clinical and biochemical coma. Whenever there are indications that hypodermally administered insulin may not be adequately absorbed, the first or rarely the first two or three doses are split, giving 40 to 50 units intravenously, the rest subcutaneously.[32]

THE controversy over the initial use of glucose in coma treatment is still unsettled.[59] Following the general trend, I omit glucose in the first liter of intravenous fluid, especially in deep comas. However, I like to include glucose in the following infusions, unless the blood sugar values are still exceptionally high at that point. I find that more liberal glucose administration prevents the confusing combination of hypoglycemia and acidosis, as observed now and then. Rabinowitch [51] in 1946 said that it is not likely that a single injection of glucose would seriously damage the liver, an assumption previously made in literature.[52]

Rabinowitch [51] has excellent results with a large initial dose of protamine zinc insulin in addition to the accepted amounts of regular insulin. I have never adopted this coma approach because of the greater individual differences and therefore less predictable effects in response to longer acting insulins.

A particularly dreaded incident in severe diabetic coma is oliguria and anuria. In these cases, the judgment of how to treat with insulin is hampered by the lack of the chemical help usually obtained from urinalysis. The only laboratory aid for the determination of ketone bodies, then, remains the plasma acetone, which qualitatively or quantitatively, may serve the purpose to great advantage.[32]

OTHER conditions, in diabetic patients, often calling for much larger amounts of insulin for the time being, are infections. Many of those patients go into acidosis within a few hours after onset of the infection. At such occasions a mild diabetic is potentially in more danger, because, due to his greater self-confidence, he minimizes the deleterious effect of the infection on his diabetic state and therefore delays seeking advice. I switch such patients to regular insulin, until the infection is conquered.

In rapidly subsiding infections (as seen after surgery and with the often crisis-like effect of the modern antibiotics) a quick, drastic reduction of the amount of insulin is imperative; an additional good reason to prefer short-acting preparations in this complication.

Regarding the combination of tuberculosis and diabetes, it may be said, that the insulin treatment changed the former gloomy prognosis considerably. Adequate nutrition with proper insulin supplementation permits the maintenance of a good state of nourishment and good diabetic control—placing the tuberculous diabetic on a level with cases of non-diabetic tuberculosis.[32,53]

One of the dramatic proofs of the efficacy of insulin, which almost parallels that of its life-saving value in diabetic coma, is the successful development of the field of surgery in diabetes.[54] In the pre-insulin era, operations in severe diabetics were approached with great apprehension and were followed by a high mortality. Today, almost any surgical problem can be handled in diabetics almost as well as in non-diabetics, particularly for "elective" operations.

As in infections, in surgical diabetics short-acting insulin is safer; particularly in cases not previously studied or in patients known to be difficult to keep under stable control.

With surgical "emergencies," guided by surgical judgment, the operation should take place without delay no matter how severe and complicated the metabolic disturbance may be. The diabetic and antiketogenic treatment should start at once and concomitantly with the operation; it certainly never interferes with the surgeon. Of course, in such emergencies the risks are greater and at times one has to resort to more drastic insulin dosage.

Speedy operation is the first step of the metabolic therapy in surgical infections, too. Sometimes, after opening of the infected focus, improvement of the carbohydrate tolerance is dramatic.

DIABETES in combination with hypothyroidism and with the uncommon active pituitary and adrenal tumors should receive essentially similar considerations. Successful operation permits, indeed often necessitates, substantial diminution in insulin dosage.

Regarding anesthetics, insulin also improved the outlook. The most important point is to reduce the time of the narcosis to a minimum, regardless of which anesthetic is being used.

The overall surgical mortality in diabetics who had preoperative preparation is roughly 7 per cent. On the other hand, in "unprepared" diabetics the figure is 20 per cent. All diabetics should keep themselves under good control, even at times when there is no complication present, in order to be "prepared" for any surgical as well as medical emergency.

Insulin plays a vital role in the good outlook of the pregnant diabetic. With insulin, the chances favor a termination of the pregnancy successful to both mother and child.[55,56] The fluctuations in insulin requirement as well as the lowering of the renal threshold during pregnancy have to be reckoned with. The increasing practice of cesarean sections further improves the prognosis because it modifies the circumstances of the parturition, shortening the pregnancy and making childbirth an "elective" operation.

Special consideration is due to the insulin treatment of diabetes in childhood.[53-58] The juvenile diabetic frequently has a severe case. He often shows instability with tendency to both coma as well as hypoglycemia. A diabetic child is inclined to develop signs of arteriosclerosis very early,[59] which, in view of the excellent life expectancy, based on modern treatment, should, if at all possible, be prevented. Virtually all diabetic children require uninterrupted insulin treatment, once the diagnosis of diabetes has been established, and other types of glycosuria have been ruled out.

Children, as a rule, do well on protamine zinc or NPH insulin. In the more severe cases, the combination of regular and NPH insulin gives better results. Special patients need an additional small bedtime dose of the isophane insulin in order to avoid too steep a hyperglycemia by early morning.

A rather difficult problem in children is the avoidance of hypoglycemias. Because of their tendency to insulin reactions, globin insulin and insulin mixtures (except as specified above) have no place in the treatment. Adequate carbohydrate snacks, especially before indulging in sport activities, are imperative. The possible social implications of reactions in children may be at least as damaging as in adults. It is, therefore, much better, not to attempt a perfect control of the glycosuria and the blood sugar.[58]

ONE more complication should be mentioned in relation to insulin treatment, *i.e.* the degenerative changes, occurring in the cardiovascular tree.[60] While diabetic coma is con-

sidered preventable and curable since the advent of insulin, by the same token, the prolongation of life increased the incidence of arteriosclerosis in its different manifestations in diabetes [61] (coronary disease, Kimmelstiel-Wilson syndrome,[62] retinitis and gangrene of the extremities). The incidence of arteriosclerotic changes is three times as high as in the pre-insulin era. Degenerative vascular changes are more pronounced and advanced in diabetics than in non-diabetics of the corresponding age groups. It is assumed (though it has not been proved) that a better controlled diabetic has a better chance to postpone the development of degenerative symptoms. In the individual cases, we have to accomplish the best possible continuous control of the diabetes, by establishing the optimum balance between insulin and diet.[63] This is not too difficult in most diabetics, provided there is understanding and good will on the part of the patient. In the case of children and "brittle" diabetics, as well as those of acute medical and surgical complications, however, with our present resources we hardly may hope for a perfect control.

In the armamentarium of the psychiatrist, regular insulin plays a notable role, chiefly by inducing cerebral hypoglycemia. "Insulin shock" and "sub-shock" appear to be valuable adjuncts in the treatment of schizophrenia.[64] Psychotic individuals frequently require more insulin before hypoglycemia is produced, than do diabetics.

One other non-diabetic use of unmodified insulin is for fattening patients. Insulin in many persons helps to increase the true body weight. Twenty units twice a day with adequate diet may lead to a gain of ½ to 2 pounds a week. This effect of insulin is somehow linked with its promotion of protein anabolism secondary to its action on the utilization of carbohydrates in the presence of other anabolic hormones.[65]

The only true contraindication to prescribing insulin is hypoglycemia, regardless of origin. One is cautioned in the dosage of insulin in angina pectoris and coronary disease. In middle aged obese diabetics, insulin is discouraged. There is no objection to the use of the hormone in nephritis and uremia.

The treatment of diabetes with insulin is based on the principle of substitution. The replacement endeavors to imitate the action of endogenous insulin production. The latter normally takes place almost continuously and adapts itself at all times to the changing needs in the body. Our presently available insulin preparations, whether short- or long-acting, can never ideally fulfill these requirements, because their efficacy is dependent on the general laws of tissue resorption; it is not based on the need of the carbohydrate metabolism. Let us hope, that an insulin will soon be discovered the resorption of which, from the tissues, would depend directly or indirectly on the level of the blood sugar. This would approximate an ideal blood sugar regulation.[66]

SUMMARY

1. The paper presents a brief description of the various uses of insulin in the treatment of diabetes mellitus and its complications. It is based on modern knowledge and aided by personal experience of 28 years on a diabetic material of over 5,000 patients.

2. The following subjects are discussed: criteria of insulin treatment, regular and crystalline zinc insulins, protamine zinc insulin, combined use of unmodified and protamine zinc insulins, globin insulin, insulin mixtures, NPH insulin, lente insulin, different routines in hospital and home care, "brittle" diabetics, paradoxical hyperglycemia, insulin reaction, -resistance, -allergy and -lipodystrophy, the use of insulin in complications of diabetes: acidosis and coma (including anuria and the controversial glucose administration in the initial coma treatment), infections, tuberculous diabetes, surgery and anesthesia, pregnancy and parturition, diabetes in children and cardiovascular involvement.

3. The use of insulin in psychiatry and for fattening of non-diabetics is mentioned.

4. Insulin contraindications are reviewed.

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A bibliography of 66 citations will be found in the author's reprints

Fred B. Rogers, M.D.*

Trenton

Cyrus Fogg Brackett: 1833-1915

Physicist and Physician

In this thumbnail biography, Dr. Rogers lifts from ill-deserved obscurity that interesting and useful citizen of New Jersey: Cyrus Fogg Brackett, M.D.

The medical profession has always included members who have distinguished themselves in other ways as well as in the practice of medicine. Physicians have attained distinction in the physical as well as the medical sciences. William Gilbert, physician to Queen Elizabeth I, founded the science of magnetism and coined the term electricity (from the Greek word for amber). Other medical men of the past who made significant contributions to physical science include Daniel Bernoulli, pioneer in hydrodynamics, and Hermann Ludwig von Helmholtz who greatly enlarged our knowledge of optics and sound. Physicians with genius of such comprehensive and varied character, however, are met less frequently in the present specialized age. A recent outstanding physician-scientist in New Jersey, however, was Cyrus Fogg Brackett, physicist, physician, educator, engineer, inventor and trusted technical advisor to Thomas Alva Edison.

Dr. Cyrus Fogg Brackett, one of the most versatile men of his time, headed the physics department at Princeton University for thirty-five years and founded the School of Electrical Engineering there. At the same time, moreover, he was, for 20 years, chairman of the New Jersey State Board of Health. A citizen of New Jersey for over forty years, his scientific stature has become more and more apparent with the passage of time. It is especially appropriate now, forty years after his death, to review the life and work of this outstanding physician. Few Americans have contributed to so many fields—and with such genius!

Cyrus Fogg Brackett was born on June 25, 1833 at Parsonfield, Maine, the son of John and Jemine Lord Brackett. By teaching school, he put himself through Bowdoin College, being graduated with the degree of Bachelor of Arts in 1859. After serving in 1860 as principal of Limerick Academy in Maine, he taught science for two years at New Hampton Institute in New Hampshire. While doing this, he also managed to study medicine and received his M.D. degree from the Medical School of Maine at Brunswick in 1863. The following year was spent in advanced study at the Harvard Medical School. Here he came under the influence of Oliver Wendell Holmes, the celebrated physician-author whose unforgettable manner of teaching undoubtedly influenced Brackett's later style.

In 1863, Dr. Brackett returned to Bowdoin College as instructor in chemistry. Advanced

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to the rank of professor the following year, he married Alice A. Briggs of Amesbury, Mass. During his professorship at Bowdoin, Brackett taught chemistry, geology, mathematics, physics and zoology. He was also state assayer of Maine and a member of the Maine Board of Agriculture. With a faculty colleague he edited the *Bowdoin Scientific Review* for two years (1870-72). In this publication he asserted his enthusiastic belief in the recent doctrine of evolution, the mechanical theory of heat, and the electromagnetic theory of light.

IN 1873, on the recommendation of Professor Joseph Henry, Dr. Brackett was appointed to the new chair of physics founded at Princeton in honor of the former scientist who had left New Jersey to become the first Secretary of the Smithsonian Institute at Washington, D. C. It was largely because Princeton's Scottish President, James McCosh, had so much confidence in the new professor's ability that the John C. Green School of Science was established at this time. Several of the more conservative Presbyterian members of the faculty, however, looked upon Brackett's scientific beliefs with considerable suspicion. The corner residence in Princeton where he lived next to the college astronomer (who held similar "radical" views) was for some time jokingly known as the "Atheists' Corner."

When Dr. Brackett arrived at Princeton, electrical science was still in its infancy. As there were few accurate electrical recording instruments, measurement was largely application of intelligent guesswork. The new professor soon achieved considerable reputation for devising several improved appliances in electrical science. One was the cradle dynamometer, an instrument for measuring power which he invented to test Edison's dynamo at Menlo Park. In the electrical congresses of 1883 and 1884, Brackett was a member of a commission which defined the practical system of electrical units including the ampere, ohm, and volt. During this period, phenomenal developments in applied electricity made his laboratory in Princeton the meeting place and workshop of scientists whose names are famous for their useful inventions.

A warm friend of Thomas Edison in particular, Brackett conducted many tests for him and helped with patent litigation connected with Edison's invention of the incandescent lamp (1879), the development of the electric storage battery, and the discovery of the "Edison Effect" (1880)—the latter the basis of today's electronic industry. The "Edison Effect" (emission of electrons from an electrical filament) was discovered by Edison at Menlo Park just 75 years ago. The actual bulb used for patenting the "Edison Effect Lamp," an electrical indicator to record fluctuation in voltage, was presented to Professor Brackett by its inventor as a token of his esteem. This bulb recently formed a part of a commemorative exhibit at Princeton University.

Dr. Brackett was also called as an expert in litigation connected with the development of the telephone. Although genuinely modest about his own achievements, he used to state with sardonic satisfaction, "The lawyers say there are three classes of witness: liars, damn liars, and experts. I am an expert!"

PROFESSOR BRACKETT'S classroom at Princeton was the first electrically lighted classroom in America. He installed a dynamo and battery system of his own construction for this purpose in 1880. He also built the first telephone line in Princeton. It ran from his laboratory to the nearby astronomical observatory.

IN 1888, at the request of the college's trustees, Dr. Brackett somewhat altered the character of his work to organize Princeton's School of Electrical Engineering. This school, which opened in September, 1889, provided the first formal course in electrical engineering given in the United States and perhaps in the world. After 1889, Brackett's teaching was primarily devoted to his engineering students and he directed the School of Electrical Engineering for the rest of his academic career.

When, at his own insistence, he retired as Professor of Physics, Brackett left his department with equipment second to none in the country. When laboratory equipment was not readily accessible during his tenure, he would construct his own. His mechanical skill was much admired. The Palmer Physical Laboratory, originally built to house both physics and electrical engineering departments, was presented to Princeton University in 1908, the year in which he became Professor Emeritus—in direct recognition of his own personal worth. Two members of Professor Brackett's first class in Princeton showed their affection for him by establishing an endowment fund for this laboratory. From the time of his retirement until a few days before his death on January 29, 1915, Dr. Brackett continued working at research projects in his laboratory.

Although enjoying an international reputation as a physicist, Cyrus Fogg Brackett also utilized his medical training for the public good. His long and cordial association with The Medical Society of New Jersey began formally on May 25, 1880. On this date he was elected as honorary member (a distinction still limited to only fifteen living persons) at the Society's Annual Meeting. This meeting was held in his lecture room in the School of Science Building on the Princeton campus. While on the Princeton faculty, Dr. Brackett was simultaneously Chairman of the New Jersey State Board of Health from 1888 to 1908. He was also president of the New Jersey Health and Sanitary Commission, and long acted as chairman of the University's Infirmary Committee.

Active in local as well as state medical matters, Dr. Brackett was chairman of the Princeton Board of Health for many years following its organization in 1880 to combat an epidemic of typhoid fever. This epidemic was traced to pollution of the wells in the community by adjacent cesspools. It was the need for pure water, emphasized by Brackett's Board of Health, that led to the formation of the Princeton Water Company which has supplied the community with artesian water for more than sixty years.

Under his leadership, the New Jersey State Board of Health effected numerous reforms, championed improved sanitation, and initiated professional certification of health officers and sanitary inspectors. In 1896 the first State Laboratory of Bacteriology and Hygiene was established at Princeton in a building especially donated for this purpose by the University. During the following year (1897) courses in sanitary science were instituted at Rutgers University to train health personnel. In recognition of his medical accomplishments, the Academy of Medicine of New Jersey elected Dr. Brackett to honorary membership when this organization was founded in 1911. At the time of his death, Dr. Brackett was also the oldest honorary member of The Medical Society of New Jersey.

Cyrus Fogg Brackett will long be remembered as a great and inspiring teacher. During his life he subordinated desire for personal celebrity to his duties as a teacher. His winning personality, coupled with a keen and original mind, won him the respect and devotion of two generations of Princeton students. Predeceased by his wife and without children of his own, many sons of Princeton nevertheless, could count him as their spiritual parent. On receiving a second honorary degree from Princeton in 1910, the audience gave him an enthusiastic ovation—a token of their appreciation for his teaching. A brilliant educator, he had added personal charm and inspiration to ripe scholarship. His beneficent influence at Princeton was not limited to physicists and engineers. He firmly believed that some knowledge of his particular field was essential to any liberal education. Dean Howard McClenahan, one of his students (later Director of Philadelphia's Franklin Institute) said that Brackett's lectures were brilliant beyond comparison with any others at Princeton and enriched by novel and striking experiments that were so carefully prepared that they almost always "clicked." Dean McClenahan added that "Great physicians, artists of note, engineers and business leaders have confessed the stimulating effect of Dr. Brackett's lectur-

ing upon their intellectual lives." Largely informal, the professor's instruction stimulated intellectual curiosity as it was admittedly aimed at making students think for themselves. Dr. Brackett's slogan was "Facts in books, statistics in encyclopedias, the ability to use them in men's heads!"

Numerous other student tributes swell Brackett's reputation as an educator. Regarding his teaching style Dean McClenahan noted: "Dr. Oliver W. Holmes must have had an enormous, though quite unconscious, influence upon the methods followed by Dr. Brackett in his lecturing and his teaching. The quizzical humor, the sometimes grotesque illustrations, the great breadth of knowledge called upon to point a moral or to adorn a tale, all seem suggestive of the genial author of *The Autocrat.*" To have attended "Cy" Brackett's lectures in his popular elective course, "The History of Natural Philosophy," (the latter term the older, broader name for the science of physics) was an unforgettable experience. The wide expanse of the doctor's intellectual horizon was evident in his frequent digressions from the announced topic. These digressions were liberally sprinkled with Yankee Philosophy and Rabelaisian wit. His teaching betrayed a profound insight into, and respect for, natural phenomena, wide reading in the classics, history, literature and philosophy, medical knowledge and deep human sympathy. He was a lifelong student of the Bible as well as a forceful orator and proved popular as a speaker at daily college chapel services.

EQUALLY at ease in Latin, French and German, Brackett urged his students, especially graduate students, to read scientific works in their original tongues. An accomplished musician, it was his habit on occasion to play the violin while accompanying himself on a small foot-operated parlor organ! Students and faculty alike recognized him as one of the most colorful and versatile men of his age, a reputation shared with his contemporary Prime Minister William E. Gladstone of England. One student wrote:

"I seemed to be entering new and more spacious worlds when I took up physics with Dr. Brackett."

Another added:

"His course in physics was a remarkable one. Not many of the students learned much about physics, owing to their disinclination or their inability to master mathematical formulae, but Dr. Brackett recognized this fact and while teaching physics taught what was more important than physics—the philosophy of life, morals and manners. Very stimulating were his talks and to many a man on the seats before him there came an awakening, a sudden conception that there is more in life than beer and skittles."

Numerous anecdotes are recalled about Brackett's dynamic style of teaching. A distinguished clergyman late in life admitted without embarrassment that he had always been interested in blowing soap bubbles and still did so when the spirit moved him—largely on account of the fascination derived from Professor Brackett's demonstration accompanying his lecture on surface tension. This clergyman's roommate, in turn, took such a liking to physics that he made it his career and went from a professorship in physics at Princeton to become Dean of the faculty.

DR. BRACKETT was not a prolific writer. He was an editor of the volume *Electricity in Daily Life* (1890), and with William A. Anthony wrote an *Elementary Textbook of Physics* (1884). Not solely an indoor scientist, Brackett and General Joseph Kargé, professor of modern languages at Princeton, led a group of students in the first of several scientific expeditions to Colorado and Wyoming. This group, self-labelled the "Natural Science Association at Princeton," travelled in the railroad car which Grant and Hayes had used for their presidential tours. Although in the course of their travels the youthful scientists were frequently greeted as a visiting baseball team, several of them that summer began serious work in geology and paleontology which later developed into outstanding careers.

A prominent scientist of his time, Dr. Brackett was an active member of the Franklin Institute and an outstanding figure in its International Electrical Exposition in 1884, the first exposition of that character ever held. An

International Electrical Congress, sponsored by the United States Government in connection with this exposition, officially accepted important electrical units adopted for the first time.

Dr. Brackett was a member of the American Association for the Advancement of Science for many years and in 1886 was vice-president of its Section B. Elected to membership in the American Philosophical Society (1877), he later became a member of the American Physical Society at its first meeting in 1899. He was also a member of Phi Beta Kappa and Delta Kappa Epsilon fraternities.

NUMEROUS honors came to Dr. Bracket during his eighty-one years. He received an honorary Master of Arts degree from Princeton in its sesquicentennial year (1896) and honorary Doctorates of Laws from Lafayette (1883), Bowdoin (1892) and Princeton (1910).

Posthumous honors include The Cyrus Fogg Brackett lectureship founded in 1921 by action of the Princeton Engineering Association, and the Brackett Professorship of Physics established at Princeton in 1927. Today, a marble bust of Dr. Brackett by Joseph Schiller stands in a special niche on the main stairway of the Palmer Physical Laboratory. A lifesize stone medallion bearing a likeness of his head in relief appears on the south wall of this building. The latter, by an unidentified artist, bears the inscription, *Cyrus Fogg Brackett M.D., LL.D., MCMX*. This medallion was a gift of the donor, Mr. Stephen S. Palmer, who gave the laboratory "in honor of the Doctor."

These surviving memorials at Princeton are but silent reminders of the distinguished physicist and physician who graced two professions in New Jersey not long ago. President Harold W. Dodds of Princeton University has, however, tersely cited Cyrus Fogg Brackett's greatest monument—his intangible influence on the lives and minds of his students.

"In the long line of teachers who have passed through Princeton, Professor Brackett stands out preeminently by reason of his influence over his students and the devotion and respect which he inspired. Important as were his contributions to Physics and his long service as chairman of the New Jersey State Board of Health, all who knew him agree that his chief monument are the students whose lives he enriched in such measure. No memorial that human hands might erect can equal this."

Donnelly Memorial Hospitals

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Elmer N. Mattioli, M.D.
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Role of the Frozen Section in Breast Surgery*

In a carefully reviewed series of 116 cases, Dr. Mattioli finds that frozen section is the most accurate technic of pre-paraffin diagnosis in breast tumors. It was found 96 per cent accurate in detecting the malignancy of carcinomata and 93 per cent correct in recognizing the benign nature of non-malignant lesions. It does not, of course, stand by itself as a push-button method of diagnosis. On the contrary, as the author here points out, it must be geared into all the other diagnostic tools at the command of the surgeon and the pathologist.

In utilizing frozen sections in breast surgery, the tissue in question is given immediately to the pathologist for his diagnosis while the anesthesia is continued. The ultimate procedure (radical mastectomy, simple mastectomy or closure of the wound) will depend on his report. I studied 116 cases, and compared the frozen section diagnosis to the diagnosis made from routine paraffin sections of the original biopsy material plus such additional tissue as was removed subsequent to the frozen section report. When the frozen section diagnosis was equivocal, the wound was closed and the patient returned to her room to await further surgery if indicated by the more definitive paraffin section report.

In the method used at Lankenau Hospital* the tissue is frozen with carbon dioxide and cut with a microtome to a thickness of 15 to 50 micra. Sections are transferred from distilled water upon a slide and floated into a 0.5 per cent solution of thionin in 20 per cent alcohol where they stain for from thirty seconds to one minute. They are then washed in distilled water and mounted on a slide. The cut section is covered with glycerin and a cover slip.

We have been able to use this method successfully and report the diagnosis to the surgeon in an average time of nine minutes, with three minutes minimum time and fifteen minutes maximum time.

Wilson,[1] in 1905, introduced the method of sectioning fresh tissue with the freezing microtome and staining it with polychrome methlene blue for diagnosis during operation. In 1927, Terry[2] discovered an entirely new principle in the technic of fresh tissue biopsy study. He devised the method of cutting relatively thin sections with a biconcave razor, and staining superficially on only one side with a polychrome stain. The slice of moist tissue,

*This work was done at the Lankenau Hospital, Philadelphia, under the auspices of Dr. Clark E. Brown, Chief of Pathology, when I served as a resident in pathology in 1950.

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with the stained side uppermost, is examined by means of artificial transmitted light. Hellwig,[3] who previously used the method of Wilson, soon became convinced of the superiority of the Terry technic. Other technics (Slavkin [4]) have been devised, but the Wilson and Terry methods are the ones still utilized by most pathologists. Probably a majority of hospital pathologists prefer Wilson's method.

Table 1 summarizes 116 breast lesions demonstrating the relative diagnostic accuracy of frozen sections compared with the results by clinical diagnosis before operation (pre-operative), during operation (gross), and by the final paraffin method.

Table 1 indicates that the frozen section method was 96 per cent and 93 per cent accurate in the malignant and benign cases respectively. Gross surgical diagnosis was 87 per cent accurate in 21 malignant cases and 89 per cent accurate in 28 benign cases. It should be noted that 51 malignant and 16 benign cases were not diagnosed grossly because the surgeon relied on the pathologist's frozen section diagnosis. Pre-operative clinical diagnoses were 66 per cent accurate for malignant cases and 87 per cent accurate for benign cases.

Management of the 69 cases of malignant tumors of the breast is summarized in Table 2.

In the three cases of delayed radical operation, there were uncertainties in the records and it was deemed advisable to await reports based on the study of paraffin sections. In two other cases, a simple mastectomy was performed at the original procedure, and a radical mastectomy was done later. In one this was due to a technical error. In the other case, both surgeon and pathologist elected this procedure until the diagnosis was confirmed by paraffin sections. In ten cases, either a simple mastectomy or no additional procedure was performed because of other circumstances (age of patient, medical condition, extent of disease, and so on). One patient had a simple mastectomy for non-infiltrative ductal carcinoma because, in the surgeon's opinion, no further surgery was indicated.

Forty were diagnosed by frozen section as benign lesions and were treated accordingly. One was diagnosed fibroadenoma by frozen section. The surgeon disregarded this report since he believed the lesion to be a papillary carcinoma and performed a simple mastectomy. The frozen section diagnosis was later confirmed by paraffin section report.

Of the six errors made by frozen section method three were diagnosed as benign and later proved to be malignant; and three were diagnosed as malignant and later proved to be benign. These are summarized in Table 3.

Infiltrating ductal carcinoma and adenocarcinoma respectively were the most frequent malignant lesions. Fibroadenoma and benign cystic disease were the most frequent benign lesions.

The prime value of the frozen section technic is speed in making a diagnosis. However, speed is not necessarily paralleled by accuracy. Two of the most important factors in the problem of accuracy are related to technical

TABLE 1A. DIAGNOSTIC ACCURACY: 72 MALIGNANT LESIONS

		Numbers Diagnosed		Percentage of Diagnoses	
Diagnostic Method	Cases	Correct	Erroneous	Correct	Erroneous
Clinical and pre-operative	71	47	24	66%	34%
Gross, surgical	21	20	1	87%	5%
Frozen section	72	69	3	96%	4%
Paraffin section	72	72	0	100%	none

TABLE 1B. DIAGNOSTIC ACCURACY: 44 BENIGN BREAST LESIONS

		Numbers Diagnosed		Percentage of Diagnoses	
Diagnostic Method	Cases	Correct	Erroneous	Correct	Erroneous
Clinical and pre-operative	40	35	5	87%	13%
Gross, surgical	28	25	3	89%	11%
Frozen section	44	41	3	93%	7%
Paraffin section	44	44	0	100%	none

TABLE 2. PROCEDURES IN MALIGNANT TUMORS

	Cases
Immediate radical operation	53
Delayed radical operation	3
Simple, but later radical mastectomy	2
Simple mastectomy	5
No additional procedure	6
Total	69

TABLE 3A. FALSE NEGATIVES IN FROZEN SECTION DIAGNOSIS

Frozen Section	*Paraffin Reports*
1. Schimmelbusch's disease	Infiltrating [20] ductal carcinoma
2. Fibroadenoma	Infiltrating [21] ductal carcinoma (mucinous type)
3. Benign cystic disease	Intraductal [21] carcinoma

TABLE 3B. FALSE POSITIVES IN FROZEN SECTIONS

Frozen Section	*Paraffin Reports*
1. Papillary carcinoma	Intraductal [22] papilloma
2. Carcinoma	Benign cystic [23] disease
3. Carcinoma	Cellular fibroma [24]

20. Patient readmitted for a radical mastectomy.
21. Patient lost to follow-up study.
22. Partial axillary dissection and simple mastectomy were done.
23. Surgeon awaited paraffin section report.
24. As the patient was a poor surgical risk, a simple mastectomy was done.

difficulties in the preparation of the material and the skill of the pathologist in reading the slide. Many otherwise competent tissue pathologists are relatively unfamiliar, through lack of experience, with tissue appearances in frozen section. They may, as a result misinterpret these sections. This problem has been discussed by Breuer.[5]

The frozen section technic is established in every part of this country. Most pathologists and surgeons have been exposed to it in varying degrees. However, there is still no unanimous agreement as to its value. Bloodgood,[6] one of the pioneers of the method had, by 1931, completely reversed his stand. Ewing[7] felt that the diagnostic accuracy, in his hands and in the hands of others, was greater with gross examination than with frozen section. A similar tendency to rely on other methods is noted by Warthin,[8] Neely,[9] Khedroo and associates,[10] and Haagensen and Stout.[11] There are conservative opinions, as noted by Ackerman and Regato,[12] which relegate the frozen section to those relatively few cases, particularly of breast tumors in which the diagnosis from gross examination is in doubt.

On the other hand there are many active proponents of the routine use of frozen sections. Among these are Hellwig,[13] Marshall,[14] Saner,[15] Harrington[16], and Saphir.[17] They use this method in the established fashion as an aid to the immediate diagnosis of malignancy and as an aid in the determination of the extent of surgery.

The advantage of the frozen section technic is that the patient is subjected to only one surgical and anesthetic risk, one expense, and only one psychic trauma (Saphir[17]). Theo-

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14. Marshall, Samuel F., and Forney, N. Jr.: Surgical Clinics of North America, 26:723 (June, 1946)
15. Saner, F. D.: Journal of the Royal Institute of Pub. Health & Hyg., 9:109 (April 1946)
16. Harrington, S. W.: Journal of the American Medical Association, 148:1007 (Mar. 22, 1952)
17. Saphir, Otto: Journal of the American Medical Association, 150:859 (Nov. 1952)
18. Campbell, J. L.: Journal of the Med. Ass'n. of Georgia, 34:1 (Jan. 1945)
19. Curphy, Theordore J.: Bulletin of American Cancer Society, 27:8 (August 1945)

retically, another advantage as expressed by Campbell,[18] is the prevention of tumor dissemination by eliminating the waiting period between biopsy and definitive surgery. However, this view is disputed by Curphey.[19]

The disadvantages of the method are, in the main, those resulting from questions of diagnostic accuracy. With experience, the gross diagnosis by the surgeon and/or the pathologist will allow for a high proportion of accuracy. Whether frozen sections can increase this accuracy is sometimes doubted. The problem cases grossly may remain problems after frozen section. This may possibly increase the incidence of false positive diagnoses for malignancy. Much rests upon the experience and proficiency of the pathologist and on his willingness to admit his lack of assurance as to the diagnosis in a particular case.

SUMMARY

FROZEN section biopsy is a valuable diagnostic technic for tumors, but gross diagnosis, the pre-operative diagnosis and good surgical judgment must logically be included in any integrated plan of action. In doubtful cases, it may be better to wait a few days for a more definite paraffin diagnosis rather than subject the patient to an unnecessary, mutilating operation. In this small series, frozen section was found to be the most accurate method of pre-paraffin diagnosis. It was the one most frequently used and therefore should receive prime consideration before any surgical conclusion is reached. Fnal decision about a radical operation rests with the surgeon. This decision is made by considering the frozen section, the age of the patient, the gross appearance of the lesion, and the pathologist's certainty of diagnosis. When a perplexing case arises it may, at times, be wise to wait a few days until the paraffin diagnosis can be made. With a good surgeon-pathologist relationship, carcinoma of the breast may be accurately diagnosed at operation in a very high proportion of cases. This, in turn, should increase the chance of cure.

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Transfusion of Warm Blood

Marting and his colleagues (Am. Journ. Dis. Childr. 89:289, May 1955) find that the introduction of a large amount of cold blood (70 to 80°) into the circulatory system of an infant apparently produces adverse effects. Body temperature falls appreciably. A shock-like state may develop with sudden cessation of oxygenation of blood. The authors developed two types of blood warmers which have been used in 21 exchange transfusions. In all but one case the rectal temperature was unaffected. None of the infants developed signs of shock or failure to oxygenate the blood. In most cases the warm transfusions proceeded so well that 500 cc. of blood was used. It is tentatively concluded that use of warm blood (96 to 100°) is practical and beneficial.

Arthritis and Cortisone

According to Duff, *et al.* (M. Clin. North America 39:413, 1955) intra-articular administration of hydrocortisone is a worthwhile addition to established methods of treating patients with rheumatoid arthritis. It should be remembered, however, that control of the rheumatic process in the treated joint can be associated with progression of the disease in other joints. In 4 of 60 patients, maintenance of physical activity by hydrocortisone injections into the knee joint appeared to contribute to rapid progression of pre-existing disease in the hip. Perhaps the risk of this complication must be accepted as a consequence of controlling pain and thereby permitting continued use of weight bearing joints.

Alexander Strelinger, M.D.
Elizabeth

Enteritis Due to Antibiotic Resistant Cocci: a Serious Postoperative Hazard

After operation, a patient may develop a stubborn or even fatal enteritis due to an antibiotic-resistant Staphylococcus. Unless the organism's resistance to antibiotics is known, the surgeon may lost much valuable time trying to clear it up. This strain is susceptible to erythromycin, as spelled out in Dr. Strelinger's article.

The Massachusetts General Hospital recently reported [1] a 57-year old man, who had had sleeve-resection of the sigmoid for polyposis. Postoperatively he received penicillin and streptomycin. On the third postoperative day, his temperature rose to 104.8. He had diarrhea. On the next day, he was in shock with a temperature of 105. His blood pressure then was 64/40, pulse 120, and respirations 35. Urine output was markedly diminished. On reoperation, an acutely inflamed small bowel loop was exteriorized but not opened. The patient died two days later. Autopsy showed a membranous enteritis. Culture of the intestinal contents resulted in the growth of staphylococci* which were not sensitive to penicillin, streptomycin, oxytetracycline or chlortetracycline. This report demonstrates the danger of infection by cocci resistant to certain antibiotics.

Weinstein [2] reviewed the changes produced in normal bacterial flora by antibiotics and the superinfections resulting from those changes. Negligible, normally present Gram negative bacteria may cause superinfections by becoming dominant. Such bacteria include: Hemophilus influenzae, Escherischia coli, Aerobacter aerogenes, Pseudomonas aeruginosa, various strains of Neisseria, Proteus vulgaris and Klebsiella pneumoniae. The report also emphasizes, that Gram positive bacteria, ordinarily sensitive to antibiotics, may occur in resistant form, and also cause superinfections. Staphylococcus aureus* is one of these bacteria. The present report is concerned with staphylococci resistant to various antibiotics; specifically, a clinical case is cited in which antibiotic-resistant staphylococci caused enteritis and extreme toxicity.

Two factors are responsible for the occurrence and spread of antibiotic-resistant staphylococci: hospital residence and the wide use of antibiotics. Among the personnel of a large hospital, Rowntree and Thomson [3] found that 54 per cent were staphylococcus carriers; 80 per cent of these harbored penicillin-resistant staphylococcus strains. Clarke [4] studied infections caused by coagulase-positive staphylococci in hospital patients. The cocci were resistant simultaneously to penicillin, sulfonamide, streptomycin and to some or to all of the "newer" antibiotics: chlortetracycline, oxytetracycline and chloramphenicol. (Erythromycin is not mentioned in this report.) The resistant staphylococci were readily recovered from ward air and dust, as well as from the

*Some of the references cited refer to Staphylococcus aureus by the alternate term: Micrococcus pyogenes. For uniformity, this report uses the term Staphylococcus aureus throughout. Similarly the proprietary names of antibiotics, used by some of the reports, were replaced by U.S.P. terms.

noses of the patients and of the staff. The subject is also treated in an editorial [5] and similar conclusions are reached. Metzger [6] found that 70 per cent of the staff at the Walter Reed Hospital carry antibiotic-resistant staphylococci with multiple resistance to penicillin, streptomycin, oxytetracycline, chlortetracycline. On the other hand only 7 per cent of blood bank donors normally carry staphylococci resistant to penicillin alone. Fusillo [7] reporting from the same institution on clinical material, found that penicillin resistant Staphylococcus aureus* fluctuated from 30 per cent in 1943 to 62 per cent in 1951. In 1952 there appeared a drop in the penicillin-resistant forms to 49 per cent. But an increase in forms resistant to chlortetracycline and oxytetracycline occurred.

ANTIBIOTIC-RESISTANT STAPHYLOCOCCI

STAPHYLOCOCCI may be rendered antibiotic-resistant by subsequent cultures using increasing concentrations of the antibiotic. Barber [8] studied four strains of staphylococci. They were subjected to three or more series of transfers on penicillin ditch plates with solid media. Four penicillin-resistant variants were developed. One of these was penicillin-dependent. All variants showed a changed morphologic appearance in various degrees. Barber thought that these variants have no clinical significance. Blair and Carr [9] studied various infections of long duration and showed by phage typing that the infecting agent remained constant. Fusillo [7] used the methods developed by Blair and Carr [9] for phage typing of 485 staphylococci obtained in the Walter Reed Hospital. Resistance was encountered as follows: to penicillin 74 per cent; to streptomycin 66 per cent; to chlortetracycline 67 per cent; to chloramphenicol 3 per cent; to oxytetracycline 67 per cent; to erythromycin 0.6 per cent; to carbomycin 0.6 per cent. Szybalski [10] working with 34 antimicrobial drugs, isolated some penicillin-dependent and also chloramphenicol-dependent strains of staphylococcus. Metzger [6] suggests, on the basis of phage-typing studies, that in human hosts the resistant strain is either present originally in undetectable numbers, or is obtained by hospital cross-infection. He does not evaluate the contribution of the human host to alteration of the phage pattern of given strains of staphylococci. Finland [11] and Purcell [12] showed that staphylococci may be rendered resistant to streptomycin and erythromycin by gradual increase of the concentration of these drugs in the nutrient media. Rajam [13] induced resistance of staphylococci to erythromycin and to carbomycin by gradually increasing the concentration of these antibiotics in five successive transfers. The resistant strains did not differ from the parent strains in ability to produce coagulase; nor did they appear to produce carbomycinase or erythromycinase. Chandler [14] examined a number of penicillin-resistant strains of staphylococci and found that all except one produced penicillinase. These and other reports indicate that penicillin-resistant staphylococcus strains are mostly coagulase positive, hemolytic, and they produce penicillinase. Some of them, at least in culture, may be penicillin-dependent.

CLINICAL CASES

AS THE use of antibiotics spread, clinicians began to see infections caused or aggravated by antibiotic-resistant staphylococci. Jackson [15] reported that 37 out of 91 patients treated with oxytetracycline for pneumonia had diarrhea and/or continuous vomiting; from 18 of these 37, stool cultures were made. In 12, Staphylococcus aureus*, resistant to penicillin, to oxytetracycline and to chlortetracycline was found as the sole or predominant organism in the watery feces. He quotes Finland and Haight who tested 33 strains of staphylococci obtained in severe diarrhea, most in oxytetracycline-treated patients. All strains were highly sensitive to erythromycin, but 91 per cent were resistant to penicillin, 64 per cent to chlortetracycline, and 79 per cent to oxytetracycline. Jackson [15] concludes that therapy of staphylococcus diarrheas includes the prompt discontinuance of the offending antibiotic, as soon as the condition is recognized, and insti-

tution of intensive symptomatic therapy; erythromycin is highly recommended.

Fairlie [16] reported three fatal cases of enteritis following penicillin-streptomycin therapy. Staphylococcus aureus* was present in the stool culture of all three. Two non-fatal cases of enteritis were also reported; in one, enteritis followed penicillin-streptomycin therapy, but no staphylococci were recovered from the stool. In the other, oxytetracycline was given, and the stool culture yielded Proteus rather than staphylococcus. Brown [17] reported two fatal cases of postoperative enteritis, both arising after antibiotic therapy. Staphylococcus aureus* was identified in both; in addition Pseudomonas was found in one, and Proteus in the second. No sensitivity tests were reported. Dearing [18] tells of 40 patients hospitalized for some illness or surgical procedure who received oxytetracycline or chlortetracycline on this occasion. The cases were divided into the following groups:

1. Four patients pre-operatively prepared with oxytetracycline. Staphylococcus aureus along with Escherischia coli and other bacteria normally present in the intestinal flora were found in the intestinal tract at operation. Administration of oxytetracycline was discontinued, and symptoms did not develop later. No erythromycin was given.

2. Nine patients in whom Staphylococcus aureus was found at operation, after pre-operative preparation with oxytetracycline. Administration of this drug was discontinued. Erythromycin was administered beginning with the first postoperative day. Symptoms did not develop later. Staphylococcus aureus disappeared from the stool cultures.

3. Four patients in whom Staphylococcus aureus was found at operation after pre-operative preparation with oxytetracycline. Administration of this drug was discontinued, and the patients were observed. All experienced severe gastrointestinal and systemic reactions. Following administration of erythromycin, symptoms abated and stool cultures became negative for Staphylococcus aureus.

4. Sixteen patients in whom diarrhea developed while they were receiving oxytetracycline. Stool cultures yielded Staphylococcus aureus. Administration of erythromycin was accompanied by disappearance of the untoward symptoms and of the staphylococci from the stools.

5. One patient who had severe diarrhea, distention, fever and shock after the use of oxytetracycline. Stool cultures yielded staphylococci. Necropsy showed subsiding peritonitis but no gastrointestinal lesion. It is felt that death was due to staphylococcic enteritis and not to subsiding peritonitis.

6. Four patients with severe diarrhea and shock who died after the administration of oxytetracycline or chlortetracycline. Necropsy revealed pseudomembranous enterocolitis. Stool cultures revealed staphylococci in pure culture. None of these patients received erythromycin.

7. One patient who had severe diarrhea and shock, died after the administration of oxytetracycline. Pseudomembranous enterocolitis found at necropsy. Cultures of intestinal contents at time of operation and at death failed to reveal staphylococci. The patient did not receive any erythromycin.

8. One patient experienced severe enteritis and shock after the administration of oxytetracycline. Cultures of stool before death disclosed Staphylococcus aureus. Large numbers of this organism were present. Because permission for necropsy was not granted, this case was not included in the above groups.

Childs [19] reported a patient who was preoperatively prepared with penicillin and streptomycin. After operation, he had a fatal pseudomembranous enterocolitis, with the blood-culture yielding Staphlylococcus aureus, the intestinal culture showing Pseudomonas and Escherischia coli, and the trachea-culture yielding Escherischia coli. Sensitivity studies were not reported. Besides enteritis other forms of infection caused by antibiotic-resistant staphylococci were also reported by various authors.

Pettet [20] considered only autopsied cases of postoperative pseudomembranous enterocolitis. In 27 years, there occurred at the Mayo clinic 94 cases with such an intensive diarrhea that it was considered the cause of death. There was no marked increase since the availability of antibiotics. No specific drug was given in any higher incidence in these cases to be of significance; operations for carcinoma of the colon were followed somewhat more often than other operations by this condition. Shock did not seem important. But in five of the more recent cases, culture of the feces at necropsy yielded Staphylococcus aureus in large numbers, and a marked decrease or absence of the usual intestinal flora.

The available reports indicate that the incidence of staphylococci *not* sensitive to erythromycin is low. Kirby [21] reported 34 mild cases of staphylococcus sepsis, the strains resistant to penicillin, oxytetracycline and chlortetracycline but sensitive to bacitracin and erythromycin; all but 3 were sensitive to chloramphenicol. Twenty-two had soft tissue infections,

ten had osteomyelitis, and two were listed as miscellaneous infections. In a patient with osteomyelitis of the spine, erythromycin-resistant staphylococci developed after six weeks of therapy with erythromycin. In most of these patients however, the organism could not be cultured a few days after commencement of erythromycin therapy. Most of the tissue infections and most of the osteomyelitides improved. In one of the soft tissue infections the organism was cultured six weeks after starting erythromycin therapy. It was still highly sensitive to erythromycin. Haight [22] cited two patients treated with erythromycin. One had infectious mononucleosis and superimposed pharyngitis. Throat-cultures showed staphylococci which did not respond to penicillin, but responded well to erythromycin. The second had pneumonia and was treated with oxytetracycline. Severe enteritis associated with persistently positive stool-cultures for staphylococci developed. After halting all previous therapy, administration of erythromycin resulted in a formed stool, negative stool-cultures, and good recovery.

Christianson [23] described a man treated for pneumonia with penicillin and chlortetracycline. He was hospitalized because of "continuous diarrhea" in profound shock. Measures of combating the shock were successful in keeping the patient alive. Pending identification of the offending organism, oxytetracycline and streptomycin were given. Hemolytic Staphylococcus aureus* was recovered from the stool and from the throat. Erythromycin was started, whereupon both the enteritis and the pneumonia improved rapidly. Christianson [23] says that survival of individuals who developed shock secondarily to staphylococcus enteritis has never been reported previously in the literature. If that is so, then the following is indeed a rare case.

A 44-year old male was admitted to the St. Elizabeth Hospital, Elizabeth, New Jersey, with an intractable duodenal ulcer. He had had two previous periods of hospitalization under the care of other physicians. One of these periods was for gastrointestinal bleeding, the other for medical management of duodenal ulcer. In spite of strict ulcer management, he failed to obtain satisfactory relief during the six months previous to his current hospitalization.

At operation, a penetrating ulcer of the second duodenal section was found, the penetration going through all coats of the medial wall into the pancreas. A four-fifths resection of the stomach and of a segment of the duodenum was done. The The duodenum was removed to the level of the penetration. Closure of the duodenal stump was difficult, because the penetrating ulcer was surrounded by inflammatory tissue. Operation was completed by an antiperistaltic, antecolic anastomosis. The immediate postoperative condition of the patient was good. He was placed on Wangensteen suction, intravenous liquids and penicillin-streptomycin intramuscularly.

On the first two postoperative days, his general condition appeared to be satisfactory; he passed gas voluntarily by rectum. General appearance was good, the abdomen soft. At the end of the second day his temperature rose to 104 and his pulse-rate to 128. On the morning of the third postoperative day, because of the insistence of the patient, the Levine tube was removed. Small amounts of water were given by mouth, and adequate volume of intravenous liquids administered. At 8 a.m., his temperature was 103.4, the pulse 120. At this time, he had a small, brown, liquid stool. During the next twelve hours, short periods of extreme restlessness alternated with periods of comfort and restfulness. At noon, at 3 p.m., and at 5 p.m. he had large bowel movements consisting of brown liquid, accompanied by expulsion of large volumes of gas. These movements had an increasingly intensive foul, putrid odor. At 6:30 p.m., he vomited 240 cubic centimeters of yellow, fecal-smelling fluid. He became very restless, and complained of feeling very hot. His temperature at 8 p.m. was 106, his pulse 148, his respirations 28 to 32. At 9 p.m. his blood pressure was 90/70; the radial pulse was thready. The extremities were clammy and felt cooler than the trunk. The abdomen was soft. There was no rigidity or mass palpable, but there was generalized tenderness to pressure. My provisional diagnosis was Staphylococcic enteritis. I surmised that the staphylococcic strain present was resistant to the antibiotics given up to that time. The next bowel movement which occurred very soon, was preserved for bacterial study. The new treatment regime began immediately thereafter.

The treatment consisted mainly of (1) discontinuance of penicillin and streptomycin; (2) institution of vigorous intravenous erythromycin therapy and (3) improvement of the patient's general condition and correction of shock. Within 12 hours (between 9 p.m. of the third postoperative day and 9 a.m. the next morning) 1 Gram of erythromycin was given intravenously. Ephedrine sulphate was given every four hours. The Levine tube was reinserted into the stomach and Wangensteen drainage instituted.

During the fourth postoperative day, intravenous erythromycin and intravenous administration of fluids continued. Within 24 hours after instituting these measures, the condition of the patient improved strikingly. By 8 p.m. of the fourth postoperative day, his general appearance was satisfactory, his temperature was 100, his pulse-rate was 110, his blood pressure 130/80, and respira-

tions 24. The intravenous administration of fluids and erythromycin were continued until the sixth postoperative day, when he was able to retain oral liquids. The consistency of the stools became solid. He had three movements on the sixth postoperative day. His convalescence being undisturbed from there on, he was discharged from the hospital on the tenth postoperative day. At that time he was on a pureed diet, and had one formed stool daily.

Culture of the stool that was obtained closely before starting the erythromycin administration, showed coagulase-positive, hemolytic Staphylococcus aureus,* and Proteus. On subculture, the Staphylococcus was 2 plus sensitive to 1 microgram erythromycin, 4 plus sensitive to 10 micrograms of erythromycin. It was not sensitive to penicillin, streptomycin, chloramphenicol, chlortetracycline, oxytetracycline and tetracycline. The Proteus was 2 plus sensitive to chloramphenicol.

The report on the blood chemistries taken on the morning of the fourth postoperative day was: blood sugar 227 milligrams per cent; nonprotein nitrogen 60 milligrams per cent, urea 60, urea nitrogen 32 milligrams per cent, Co_2: 15 meq. As blood was obtained during intravenous glucose administration, the blood sugar finding was discounted. Three days later the blood sugar was 83 and the nonprotein nitrogen was 42, Co_2: 25 meq.

An enteritis with foul-smelling, liquid stool, accompanied by high temperature and pulse rate, with an increase in the respiratory rate, and a low degree of shock developed in three days following a gastric resection. Penicillin and streptomycin were administered in the immediate postoperative period. The development of this condition seemed to threaten the patient's life. Because of the reports about antibiotic-resistant staphylococci that are generally sensitive to erythromycin, the clinical diagnosis of such enteritis was made, and erythromycin administered. As there was no quick way to substantiate the diagnosis, it remained a guess until verification came by reason of a dramatic improvement of the patient and actual identification of the staphylococcus in the stool as being hemolytic, coagulase-positive and resistant to all current antibiotics except erythromycin. Most of the reported case of staphylococcus enteritis developed slower than this one did, and did not precipitate a critical condition with such speed. But with a fast process, a critical condition of the patient arises before the necessary culture can be completed. The exact nature of the process and the means to combat it are not known at the time when they are most needed. For such cases a quicker method of identification is desirable but not available at the present time. The question arises whether phage-typing would be of any help, since Metzger [6] and Fusillo [7] reported that most antibiotic-resistant staphylococci belong to certain definite phage patterns. The determination of the suitable antibiotic is becoming increasingly important, because there is an increase of erythromycin-resistant staphylococci reported.

The significance of the low total white blood count at the height of the process in the reported case is not clear. Probably the toxicity of the process destroyed the circulating leukocytes, because formation of new leukocytes and their early release into the circulation is suggested by the number of young forms. No similar report was found in the literature.

SUMMARY

GASTRECTOMY for duodenal ulcer was done on a 44-year old patient. Postoperative treatment included injections of penicillin and streptomycin. Within four days postoperatively, an enteritis developed, accompanied by marked toxicity, high fever, and high pulse-rate. The enteritis was caused, as proved only later, by a coagulase-positive, hemolytic Staphylococcus aureus,* resistant to penicillin, streptomycin, chloramphenicol, chlortetracycline, oxytetracycline and tetracycline; but sensitive to erythromycin. The correct diagnosis was presumed by evaluation of the clinical picture before the result of bacterial cultures was received. Erythromycin was administered, and this was followed by dramatic improvement.

A canvass of the literature suggests that cases of this nature are on the increase.

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A bibliography of 23 citations appears in the author's reprints.

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Hepatic Coma Complicating Portal Cirrhosis*

Hepatic coma complicating portal cirrhosis is discussed from the standpoint of incidence, pathogenesis, diagnosis, and management. The unusual clinical and biochemical lability of precoma and comatose patients is re-emphasized.

Hepatic coma is a relatively unimportant disease. Its usual occurrence in overwhelming acute necrotic states and terminal stages of chronic liver decompensation has heretofore offered little opportunity for salvage. This association of hepatic impairment with central nervous system symptoms, however, holds an irresistible fascination for the inquisitive clinician. He is, therefore, prone to approach the problem with considerably more enthusiasm and optimism than it would appear to deserve.

INCIDENCE AND PROGNOSIS

Review of records from the Atlantic City Hospital suggests that this disorder is not uncommon. From January 1951 through 1954, coma without hemorrhage was encountered in nearly 10 per cent of all cases hospitalized with a diagnosis of portal cirrhosis. Although this complication was recorded as an accompaniment of other forms of liver pathology, notably acute fulminating viral hepatitis and acute toxic hepatitis, its most conspicuous incidence has been in connection with chronic hepatic disease, particularly Laennec's cirrhosis.

This configuration was also noteworthy by virtue of the prognostic difference between the chronic and acute forms complicated by coma. A survival rate of 30 per cent in cirrhotics contrasted sharply with much poorer results where acute liver necrosis was a factor. In general this observation [1] has been borne out by the experience of others.[2]

After hemorrhage, coma is the most important cause for death in cirrhosis. Up to 36 per cent of patients with this disease are said [3] to die in coma. The probability of recovery in these cases can be roughly estimated. The mortality-survival ratio among cirrhotics in the presence of hepato-megaly, ascites, and jaundice is one to one. Whenever other factors, such as infection, surgery, hemorrhage, intoxication or coma, are added to this basic configuration, a significant increase in mortality is expected.[4] Coma, however, may occur at any stage of chronic liver disease and without antecedent or associated jaundice.[5] It may last as long as 45 days, although, in general, the longer the interval of unconsciousness, the poorer the prognosis.[6]

DIAGNOSIS

Hepatic coma is a neurologic manifestation of severe grade liver insufficiency.[7] It can be recognized for days or sometimes weeks in

*Read April 20, 1955 at the Annual Meeting of The Medical Society of New Jersey.

advance by a characteristic diagnostic triad [8] which includes changes in mental status, a typical tremor and specific electroencephalographic abnormalities. Changes in the sensorium, including drowsiness and lethargy, may be the earliest noted. Ultimately, incoordination, inappropriate behavior, confusion, and delirium may supervene. Frequently, restlessness, agitation and irritability precede deep coma. Despite his obvious illness, the patient may assert a sense of well being.

The tremor is fairly characteristic. It is best elicited by having the patient hold his arms and hands outstretched with the fingers spread apart. Depending upon the severity of the process, as this posture is maintained, there will appear at regular intervals of a fraction of a second to seven seconds, a series of movements consisting usually of lateral deviations of the fingers, flexion extension of the fingers at the metacarpal-phalangeal joint, and flexion extension of the wrist. This phenomenon has also been described as possessing a "flapping" quality. In more severe cases these movements involve the elbow and shoulder joints. Neurologic examination [5] may otherwise demonstrate a multitude of inconsistent responses [9] which will vary with the passage of time.

The electroencephalographic changes are most often seen when coma is clear-cut. These consist of bilaterally synchronous and symmetrical paroxysms of high voltage waves in the delta range of one and one-half to three seconds' duration. They usually appear first in the frontal region and later spread laterally and posteriorly as stupor deepens.[10]

Once hepatic coma has been established, and less often in its incipiency, there is frequently observed the so-called "fetor hepaticus." The cause of this is not known. In addition to being encountered in the breaths and urines of these patients, it is also found in the urines of normal subjects. The characteristic odor, however, if recognized, can aid differential diagnosis. Wernicke's posterior superior polio-encephalitis hemorrhagica, with its mental confusion progressing to coma, as well as other encephalopathies associated with alcoholism and cirrhosis, may occasionally pose such a problem. Absence of fetor hepaticus in the presence of ophthalmoplegia and conspicuous peripheral neuropathies should assist in identifying these less grim entities, which are, particularly in the former instance, responsive to thiamine therapy.[11] Where dyspnea and tachycardia dominate the clinical picture, beri-beri must be differentiated.[7]

LABORATORY OBSERVATIONS

Less characteristic, but certainly as dramatic, are the biochemical and metabolic aberrations which have been encountered in the course of hepatic coma. These may be grouped under the following classifications:

1. Abnormal liver function studies.
2. Disturbances of plasma electrolytes and acid base balance.
3. The accumulation of alleged 'toxic" metabolites.
4. The role of ammonia.

1. The commonly employed liver function studies are usually abnormal in hepatic coma. There are no consistent patterns, however. In general they appear to be related, not to the degree of unconsciousness, but rather to the severity and progressive nature of the liver disease.[12] Hyperbilirubinemia may or may not be present. Whereas normal turbidity tests have been reported in experimentally induced acute hepatic necrosis,[13] no such finding appears to be uniform among comatose cirrhotics. A single exception may be the progressive decline in cholesterol esters [5] which has been observed with lapse into coma.[14]

2. Disturbances in plasma electrolytes do not appear to play a significant role in the induction of hepatic coma *per se*. Due to the metabolic lability in patients developing this complication and their usual poor physical status, certain secondary ionic derangements are not uncommon. In the presence of an adequate urinary output, emesis, diarrhea, simple anorexia, and the frequently encountered negative nitrogen balance of chronic liver disease [15] will predispose to excessive potassium loss. This situation may be aggravated by the administration of parenteral fluids in large volumes with resultant hemodilution. Glycogen depletion will mobilize additional potassium for renal excretion while conversely large quantities of intravenous glucose with attendant glycogen deposition will further depress the serum levels.[16] The tendency on the part of cirrhotics to retain sodium and water is not consistently accompanied by hypernatremia. Fluid losses by emesis, diaphoresis, and repeated paracentesis coupled with restricted intake can predispose to profound sodium depletion.[5]

Alterations in acid base balance are somewhat more characteristic although certainly not speci-

fically the result of accumulated organic acids, a few of which will be discussed later.[6] The absence of a typical kidney lesion would seem to suggest that a well-delineated hepato-renal syndrome is not involved.[14]

3. Pyruvic acid and lactic acid,[17] normal end-products of muscle-carbohydrate metabolism,[18] are frequently elevated in the blood.[19] This may be due to the impaired phosphorylation of thiamine, which is necessary for the complete utilization of the former, and the inability to reconvert the latter substance into glycogen in the fibrotic liver. These, however, are nonspecific findings. Identical alterations are encountered in unrelated conditions such as starvation, fever, nutritional deficiencies, physical exercise, large glucose infusions and thiamine depletion. The accumulation of alpha keto-glutaric acid during liver coma is probably another indication of impaired enzymatic carbohydrate metabolism.

Elevations in blood ketones are also of doubtful significance and may well be a reflection of the inanition starvation which commonly precedes the onset of coma in cirrhotics. The appearance of abnormal quantities of methionine in the cerebrospinal fluid likewise appears to exert no specific effect upon consciousness.[6]

4. The frequent, although again not universal, finding of high blood ammonia levels among many patients with incipient or well-established hepatic coma, has stimulated a rash of clinical speculation. It is well known that whereas the large bowel is the major source of ammonia formation, the liver is the chief site of its removal, which it accomplishes by the formation of urea. Similarly, it has been established that intracellular ammonia, if allowed to accumulate, is an extremely toxic substance. Observations have been made in both human subjects and experimental animals with either naturally-occurring or surgically-induced portocaval anastomoses, that the ingestion of ammonium containing cation exchange resins, ammonium chloride and high nitrogen diets will induce symptoms characteristic of the hepato-cerebral syndrome.[20,21,22] This phenomenon was encountered even in the absence of liver disease.[23] It would appear, therefore, that this effect is largely mediated by virtue of the fact that blood is shunted around the liver and thereby permitted to carry this substance directly into the cerebral circulation.[19] That ammonia is probably the entity which is somehow instrumental in inducing the resultant central nervous system reactions would seem to be supported by the finding that typical E E G alterations are most likely to be encountered where the blood ammonia levels are highest.[22]

Precisely how ammonia affects the brain has been subject to considerable controversy. The observation of increased cerebral glutamine formation during coma has led some to believe that the basic defect has been due to a secondary glutamic acid deficit.[24] Glutamic acid, which is essential for cerebral acetylcholine synthesis and cation exchange, is the only amino-acid oxidized by the brain. It is deaminated to alpha keto-glutaric acid, and thence enters into the Kreb citric acid cycle. Since therapeutic trials utilizing supplements of glutamic acid have failed to influence the course of coma to a significant degree,[21] it appears that the excessive blood ammonia actually interferes with the function of the Kreb cycle by combining with glutamic acid to form glutamine, thereby blocking the formation of alpha keto-glutaric acid. This impairment of the cycle results in the accumulation of pyruvate, each molecule of which, when oxidized, theoretically provides fifteen high-energy phosphate bonds.[25] It follows that cerebral phosphorylation of glucose is probably impaired as a result. Such a mechanism is supported in part by studies in cerebral hemodynamics and metabolism in hepatic coma patients which have confirmed an adequate vascular delivery of glucose but a depressed cerebral metabolic rate. This would suggest a breakdown of carbohydrate metabolism and diminished oxygen utilization at a cerebral level.[26] The rarity of typical hypo-glycemic seizures in association with hepatic coma does not refute the validity of this mechanism.

Not all instances of hepatic coma complicating cirrhosis are consistently associated with an elevated blood ammonia.[22] The foregoing sequence will probably develop only under the prescribed set of circumstances outlined. Unquestionably, a great many more facets are involved in the pathogenesis of the hepato-cerebral syndrome, which are as yet unknown. The liberation of specific toxic substances by necrotic liver tissue resulting from eschemia has been cited as a possible factor.[27] This would seem to have a more appropriate application in acute fulminating hepatitis than in chronic liver disease. It is a common experience that cirrhotics who die in hepatic coma may demonstrate no evidence of liver necrosis at post-mortem examination.[6]

OTHER PREDISPOSING FACTORS

IN ADDITION to the foregoing endogenous disturbances, numerous exogenous factors facilitate induction of the coma. These include exposure to infection; the ingestion of toxic substances, particularly alcohol; subjection of the patient to excessive physical stress, including surgery; and the indiscriminate use of hypnotics, analgesics, and sedatives. Morphine and many of its derivatives are apparently inactivated by the liver and will therefore manifest a prolonged effect in patients with cirrhosis.[5]

THERAPY

TREATMENT of the patient in imminent or well-established hepatic coma complicating portal cirrhosis [1] has made no significant inroads upon mortality in the past decade.[2] Prin-

ciples of management still include the use of large amounts of glucose with liberal vitamin alimentation, including thiamine ascorbic acid and nicotinic acid;[18] the control of bleeding, utilizing vitamin K; blood replacement; and oxygen.[6] Improved laboratory methods and a better understanding of the mechanics of electrolyte and acid base disturbances have established therapy on a sounder foundation. The introduction of the Sengstaken tube for the control of gastro-esophageal hemorrhage has been useful.[28] Glutamic acid therapy, as has already been indicated, is unsatisfactory.

Employment of antibiotics, particularly the more versatile preparations is enjoying an enthusiastic endorsement.[9,14,29,30] Aureomycin® has been cited for certain protective qualities, largely based upon the observation that rats placed upon a hepatic necrogenic diet together with the antibiotic, demonstrated a longer survival time.[31] Very large doses of the same drug, however, have produced fatty infiltration and liver cell necrosis in human subjects.[32] In view of the role that nitrogenous substances apparently play in the induction of hepatic coma among cirrhotics, the employment of Aureomycin®, *et cetera,* in a "safe" one Gram daily dose[33] may be a valuable adjuvant for the repression of nitrogen-forming organisms in the bowel. Certainly the observation that the normal liver may remove up to 90 per cent of circulating bacteria,[34] considered in the light of the comatose cirrhotic's limited reserves under the stress of any systemic infection, justifies the judicious prophylactic use of these antibiotics.

ALTHOUGH the steroid hormones appear to show some value in the management of acute necrotic situations, there is no evidence that any benefit has accrued in the hepato-cerebral syndrome of cirrhosis.[1,2,30] Indeed, there is some basis for the assumption that both ACTH and cortisone may exert a detrimental effect. Increased ascites, portal vein thrombosis, and esophageal hemorrhage have complicated therapy.[35] There is evidence that the increased tissue breakdown occurring with the use of cortisone may further elevate the circulating ammonia, while simultaneously producing a hyperkalemia.[25] This latter problem can be intensified in the presence of concomitant oliguria. It does not seem unreasonable to assume that the poor response of ACTH and cortisone may also be due to the minimal degree of acute inflammation and the restricted capacity for repair attributable to the cirrhotic liver.[30]

PREVENTION

ALTHOUGH hepatic coma is a reversible process, it is much more often avoidable. If the clinician is alert to the few dynamic factors which may precipitate coma in the cirrhotic patient, he will often find it possible to forestall the catastrophe and perhaps accomplish a considerable degree of rehabilitation in so doing.

A meticulous and vigilant program of general management must be practiced. This should include the avoidance of ammonium salts in therapy; caution in the employment of sedatives and hypnotics; and restraint in the use of abdominal paracentesis whenever possible. The practice of rigid salt restriction should ideally be controlled by periodic checks upon the electrolyte status, particularly with the appearance of gastro-intestinal disturbances that are prolonged beyond forty-eight hours. Prompt and intensive treatment of any such unrelated disorders is imperative. This should apply to the most minor infection as well. In each instance bed rest and the use of 1 Gram daily oral dose of a versatile antibiotic seem advisable. Elective surgical procedures should be undertaken only after thorough contemplation of the subject's probable hepatic reserves. Selection of anesthetic agents should favor local tissue infiltration wherever practicable.

The earliest hint of central nervous system disturbance, even of minor degree, should be regarded as a medical emergency. All of the above listed precautions should be instituted. Whenever symptoms do not improve within 24 hours, or if progression seems evident, immediate hospitalization should be recommended. The aphorism that "cirrhotics always die" ad-

monishes strict therapeutic control. If heeded, the morbidity due to coma can be appreciably diminished.

CONCLUSIONS

1. The mechanism of coma in portal cirrhosis has not yet been clearly defined. The many associated physiologic disturbances offer few clues except as they reflect a disturbed liver function. The role of ammonia intoxication through disruption of the citric acid cycle suggests one pathogenic pattern. This phenomenon is probably operative only under a prescribed set of circumstances. Induction of coma without elevated blood ammonia implies that other unknown factors are also involved.

2. The failure of newer therapeutic measures to modify significantly the prognosis in this type of hepato-cerebral syndrome, supports the practical concept that recovery, even in the presence of an absolute minimum of functioning liver cells, may be spontaneous, provided that excessive body requirements are eliminated.[36] It is this author's opinion that hepatic coma complicating cirrhosis represents an entity which should be considered separately and apart from coma arising out of acute situations.

3. Although the most common etiologic basis for coma is cirrhosis, its 70 per cent mortality in this configuration, viewed in the light that it ultimately represents an agonal stage of advanced chronic liver disease, is far less discouraging than 95 to 100 per cent mortality encountered among comatose individuals having more fulminant liver disease. At the Atlantic City Hospital, 15 per cent of all patients admitted with hepatitis between 1951 and 1954 developed coma. All of these died.

4. The problem of coma in acute liver disease is deserving of more careful analysis. As a concession to this consideration, therefore, I would amend my opening sentence to read. "Hepatic coma, complicating cirrhosis, is a relatively unimportant medical disease."

7 South Oxford Avenue

A bibliographic list of 36 references appears in the author's reprints.

Dogs May Transmit Parasites

"Man's best friend," the dog, may sometimes—accidentally—be his health enemy. The August 6 *Journal* of the American Medical Association points out that, occasionally, a dog may transmit an infectious parasite to man.

However, the few cases of infection from dog to man probably could be prevented by cleanliness, defleaing the dog, and other easy methods.

Some of the parasites of dogs which may infect man are fleas, ticks, tapeworms, and hookworms, one type of which causes a skin infection called "creeping eruption" in the southeastern United States. Dogs with mange may give their handlers a skin infection.

Sometimes dogs and men may have the same infection but in these cases it isn't the dogs' fault. It just happens that they are infected by the same parasites—which in turn came from fleas, pigs, or fish.

In fact, the physicians said, sometimes when dog infects man, the parasite of the dog came from the man in the first place.

A. L. Cantelmo, M.D.

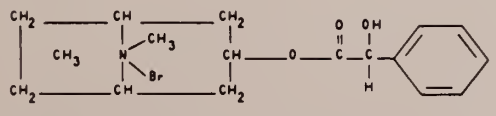
East Orange

Adjunctive Anticholinergic Treatment With Homatropine Methylbromide*

A Preliminary Report

A modern form of homatropine methylbromide (not the ophthalmic homatropine) has been found effective in a wide variety of spastic disorders. The dosage and method of administration are here detailed by Dr. Cantelmo.

New drugs now appear with great rapidity and sometimes certain old drugs are given the spotlight and are shown to have valuable properties heretofore unsuspected or never fully proved. One of these, the subject of this paper, is homatropine methylbromide.* This has been re-investigated and re-evaluated with significant pharmacologic and clinical findings. Originally it was synthesized (in 1883) by Ladenburg,[1] searching for a drug possessing atropine-like action on the autonomic nervous system and devoid of atropine-like side effects. The quaternary ammonium compound, homatropine methylbromide, was the result of the search. This is not to be confused with the tertiary ammonium compound, homatropine hydrobromide, employed in ophthalmology as a cycloplegic and mydriatic. The name "homatropine" is unfortunate, because that word suggests a non-existent similarity to atropine. Here is the structural formula of homatropine methylbromide:



Inclusion of this in the 1938, New and Non-Official Remedies and the current U. S. Pharmacopoeia was a culmination of decades of increasing usage as a reliable and safe antispasmodic. Its low toxicity has been demonstrated by Batterman and Rose,[2] and Berger and Ballinger.[3] Re-study has established its value as an effective cholinergic blocking agent.[4,5] Pharmacologically it satisfies the criteria for a ganglionic blocking agent by its muscarinic and nicotinolytic properties.[4,5] These facts were presented to the Food and Drug Administration and their official study resulted in its acceptance as a new drug with a new dosage.

*Malcotran, new drug and new dosage brand of homatropine methylbromide—Maltbie, supplied by Medical Research Department, Maltbie Laboratories.

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The new drug was made available to the medical profession under the name, Malcotran.* Experiences at the clinics of the University of Pennsylvania Medical School have confirmed the cholinergic blocking activity of homatropine methylbromide* and its uses in peptic ulcer therapy.[6] I have used the drug in private practice in a variety of cases covering practically every type of symptom and disease helped by anticholinergic treatment. Following are a few.

1. A 57-year old man had a history of urinary bladder spasm over one year since laminectomy for protruding disc. The bladder trouble seemed to be a complication of the surgery. He had frequent and painful urination and often unbearable pain of bladder spasm. He has been under care for glaucoma for four years. I prescribed homatropine methylbromide* 10 milligrams four times daily. This has relieved all symptoms. He has been on medication over a year. Monthly tonometry of eyes shows no increase in ocular tension or any other side effects of the prolonged medication. He will stay on this dosage as long as necessary. In this case it may be for life.

2. A 38-year old man had a history of extreme pain in hypogastric area. Pain "doubles him up" and has the characteristics of acute peptic ulcers. There is pyloric tenderness on mild palpation. He vomits all meals. Homatropine methylbromide* 20 milligrams every 4 hours relieved all pain. Sippy regimen was followed for two weeks, then normal bland diet. After two months he developed postural hypotension which was relieved by changing dose to 10 milligrams every 4 hours. Medication was stopped 4 months later with no recurrence of symptoms.

3. A 62-year old man complained of severe stomach pains with complete loss of appetite and cyclic vomiting of one week's duration. Acute constipation occurred. The pain had the chronicity of peptic ulcer pains. Homatropine methylbromide* 10 milligrams every 4 hours relieved all pains. He followed a Sippy regimen for two weeks, then regular soft diet. Pain disappeared and normal bowel movements were restored. After six months, medication was stopped with no return of symptoms.

4. A 42-year old male had severe gastric pains relieved only by morphine and atropine. After the second attack, I tried homatropine methylbromide* 10 milligrams every 4 hours. The pain was swiftly relieved and patient went immediately on a full diet. He is still on medication with no return of symptoms.

5. A 59-year old housewife had a history of constipation and "abdominal cramps" since surgery 22 years ago. She endured a miserable existence unrelieved by medications or treatments throughout the years. Homatropine methylbromide* 10 milligrams every 4 hours has removed all discomfort.

6. A 19-year old boy had been a bed-wetter since birth. All medications and psychotherapy had failed to stop the enuresis. But homatropine methylbromide* 10 milligrams every four hours for a month, then three times daily has corrected the condition. Since then he has had only one "accident" following overindulgence of beer.

7. A 42-year old man had years of unsuccessful treatment for peptic ulcer. X-ray showed multiple ulcerations of stomach. In June 1950 he had a partial gastrectomy. Symptoms returned on leaving the hospital. All medical treatment again failed. A year later, another partial gastrectomy and a vagotomy were performed. He had seven months' relief from this surgery. Then symptoms returned. Banthine®, Prantyl®, antacids and diets did not help. When I saw him he was unable to eat or work because of pain and vomiting. He weighed 143 pounds. Homatropine methylbromide* 20 milligrams every four hours around the clock gave almost immediate relief. After four days the dose was adjusted to 10 milligrams every 4 hours. He returned to work but complained of blurred vision. He reduced the dose to 10 milligrams twice a day and no medication during working hours. When last seen, he weighed 154 pounds and was completely comfortable. During weekends when he doesn't have to work, he takes 10 milligrams every 4 hours while awake. At present he is on full diet and states no medication to present has given him the relief that this homatropine methylbromide* has and the only side-effect he notices is blurred vision while doing close work.

The official dose of Malcotran* is listed as 10 milligrams four times a day. In my studies and in other surveys made at the hospital of the University of Pennsylvania, the dosage of 10 milligrams has been used every four hours around the clock.

Sometimes the dose has been increased to 20 or 30 milligrams to achieve relief of pain and spasm in peptic ulcer therapy. As healing progresses we keep the patient comfortable by reducing the dose. The occasional side effect quickly responded to this decrease. The low milligram dosage never accumulates enough drug in the system so as not to be responsive to change. The safety of the medication is impressively fixed in my mind because of the patient with chronic glaucoma who is still using the medication after almost two years with no increase in intra-ocular tension.

6. To be published.

SUMMARY AND CONCLUSIONS

THE history of the old antispasmodic drug, homatropine methylbromide, and the new drug and new dose of Malcotran* are discussed. Seven very varied cases in which the drug was effective are related. This form of homatropine methylbromide* is a potent cholinergic blocking agent in a relatively small dose. Side effects are non-existent or controllable in cholinergic doses. Further clinical studies on a larger scale are merited.

144 South Harrison Street

Brainwashing May Produce Psychiatric Symptoms

Chinese Communist brainwashing may play a part in producing future psychiatric symptoms in returnees from Korean POW camps, according to Peter Santucci, M.D., and George Winokur, M.D., writing in the July (1955) Archives of Neurology and Psychiatry. They suggested that because of the intensity of the conflict between ideas absorbed in the camps and American thinking, there may be more psychiatric problems in Korean returnees than in a comparable group from German and Japanese POW camps of World War II.

The desire to avoid just such a conflict may have been the reason some prisoners chose to remain in China, they said. "Brainwashing" say Santucci and Winokur "is not merely a method of indoctrination. It is a process which can produce abnormal human behavior through the development of internal conflicts and their accompanying anxiety and confusion".

In brainwashing, prisoners were forced to sing Communist songs and write pro-Communist statements. When they did not rebel, they were rewarded, usually with extra food. Thus the desirability of this behavior was "reinforced," and the action was more likely to be repeated. If the man did not believe in his statements and activities, internal conflict "inevitably" would result.

A prisoner could solve the conflict in one of three ways. He could outwit his captors by lying. He could refuse to do the bidding of his captors, which would result only in short-lived punishment. Or he could start thinking in favor of his captors, which would result in more rewards and more reinforcement of this behavior.

If he chose the third way, another conflict could occur after his return home, when he would begin to compare American concepts with those ideas absorbed in the prison camp. In this connection, Winokur and Santucci cite a 25-year-old Army sergeant of poor economic and educational background, who became mentally ill on his return home from a POW camp.

While a prisoner, he had been forced to attend lectures, where Communist and anti-American propaganda was repeated over and over. Later he was picked for several special duties and eventually sent to an advanced indoctrination school. At first, he rejected Communist *ideas* but he was rewarded for his *activities*. In time he began to absorb some of the ideas. This soldier had very little political or economic knowledge with which to resist brainwashing, compared with men who withstood brainwashing and its effects, partly because they already had well-formed hostility towards Communism.

On his return home, he met with hostility from persons who attacked as traitors those who had been brainwashed. Many of his ideas were now in conflict with those accepted by American society. This led to confusion, anxiety, and eventually hospitalization.

Santucci and Winokur suggested that treatment for this patient should include brainwashing in reverse, in which he would be rewarded and reinforced for behavior acceptable by his own society.

Frank A. Marshall, M.D.
Weehawken

Treatment of Herpes Zoster With Topical Application of Hydrocortisone

A simple, swiftly effective and relatively inexpensive treatment for herpes zoster is reported. Dr. Marshall achieved this by applying 1 per cent hydrocortisone ointment topically.

Although the literature details excellent results with cortisone in certain non-allergic serious skin diseases, its topical use in the treatment of herpes zoster has been unheralded. Until recently, the skin diseases benefited have been of the allergic response type such as contact dermatitis, urticaria and drug sensitivities or the collagen diseases like scleroderma, dermatomyositis and lupus erythematosis.

Recently, ocular complications developed in a case of ophthalmic herpes. This suggested to me the use of the topical application of hydrocortisone. In this sixty-five year old female with diastolic hypertension, severe periorbital edema, episcleritis and early uveitis developed in addition to the usual vesicular eruption of the left forehead. The eye condition demanded relief as the pain was very severe and prevented sleep in spite of analgesics. A 1 per cent topical eye ointment of hydrocortisone was prescribed. Within forty-eight hours improvement was so marked that coincidence could hardly have been the reason. In the adjacent scalp, new lesions were still developing and causing considerable annoyance. With the extension of application to this adjacent area of scalp and forehead, the eruption and its attendant inflammation subsided. The vesicles became encrusted promptly. No secondary infection occurred. Pain subsided following the use of topical application. This was more gradual than the subsidence of inflammation, but it was of appreciable extent.

In the second case, involving a forty-four year old widow, the skin of the right axillary area and right breast was involved with severe radiating pain. With no response to Aureomycin,® B_{12}, thiamin hydrochloride and slight relief of pain, but not of eruption, from salicylates and codeine, the 1 per cent topical hydrocortisone ointment was tried. Results were swift and gratifying. Uninterrupted sleep was possible after the second day's application. In this case, the effect of suppression of the skin response was readily demonstrable. The lesions subsided, regardless of their phase of development. Best results were obtained with early vesicle formations. In two instances, application of the ointment probably prevented the development of patches of vesicles, as only a slight redness appeared and then promptly subsided, as did the pain and tenderness in this local area.

The third patient, a male of thirty-three, had his attack also in the right thoracic region with chief involvement of the axilla and medial surface of the right arm. Except for the first forty-eight hours, he continued to work. Application of the hydrocortisone ointment markedly checked the developing vesicles. The relief of pain was considerable in the first forty-eight hours and practically complete in ninety-

six hours. A very small furuncle appeared near one of the vesicles on the anterior chest wall and subsided promptly with a small protective dressing.

This unusual opportunity to observe three cases of herpes zoster within a period of a month, permitted a study of the response to this disease to the topical application of 1 per cent hydrocortisone. No prior knowledge of its use in this form has been known to the author.

Without exception, response to treatment was prompt and gratifying. Duration of this self-limited disease was symptomatically reduced from weeks to days. The most striking benefit was the marked amelioration of both pain and skin lesions for the grateful patients. Sleepless nights disappeared. Within twenty-four to ninety-six hours, patients could continue their usual occupations. In no instance did a relapse occur. Applications of ointment twice daily were insisted upon until pain and inflammation had regressed completely. There was no difficulty in getting patients to comply.

No systemic effects or complications were noted in this limited series. The occurrence of a small furuncle in a third case would not justify reduction of treatment, as it promptly subsided.

Topical application of 1 per cent hydrocortisone affords an extremely simple and relatively inexpensive treatment for herpes zoster that is effective. It affords gratifying relief of pain and of the troublesome vesicular lesions for these patients.

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Combined Steroid and Antibiotic Therapy

According to Jahn and his colleagues (Journal of Pediatrics, 44:640, 1955), combined ACTH-antibiotic therapy can, under certain circumstances, be a life-saving measure. The authors employed such treatment in 83 medical and surgical patients whose survival seemed improbable. Of 42 medical cases (including meningitis, pneumonia and miscellaneous infections), hormonal-antibiotic therapy was considered decidedly beneficial in 12, significantly helpful in 6, and of doubtful or no value in 24. Of 41 surgical cases (primarily peritonitis), 16 were definitely helped and 12 partially benefited. Results in 13 subjects were doubtful or negative.

Combined ACTH-cortisone-antibiotic therapy should not be employed without full knowledge of potential hazards as well as potential assets. Administration of ACTH and cortisone to patients with severe infection results in striking clinical improvement but the organisms causing the infection continue to flourish. An effective antibiotic must be given and such therapy continued for at least three days following discontinuance of hormonal treatment.

Combined steroid-antibiotic therapy should be given only:

a. In nonsurgical diseases which are not likely to respond to antibiotics alone.
b. In surgical conditions only when surgery is contemplated for the immediate future.
c. Under careful supervision. The hormonal component of the treatment should be used for the shortest possible time.

Exceptions:

a. Combined therapy should be considered for all patients with meningococcic meningitis.
b. ACTH and cortisone may be advantageously employed in management of patients with severe viral hepatitis and in cases of mumps, orchitis even though effective antibiotics against the viral agents are lacking.

Trustees' Meeting

May 22, 1955

At its May 22, 1955 meeting, the Board of Trustees took the following actions:

—Received the President's report that letters had been sent to all state medical societies informing them of New Jersey's intent to nominate Dr. David B. Allman as President-elect of the A.M.A. in 1956.

—Agreed to uphold the A.M.A.'s position opposing Social Security coverage for physicians, but favoring the Jenkins-Keogh bill or some similar voluntary coverage legislation.

—Authorized the New Jersey delegates to use their own best judgment in voting on the report which will be presented to the A.M.A. on relations between physicians and osteopaths.

—Instructed the delegates to vote against rescinding the definition of dental and oral surgery adopted by the A.M.A. in 1953.

—Requested the delegates to support the report of the A.M.A. Committee on Medical Practices.

—Authorized any reputable insurance company which wants to submit a health and accident plan to make application through the Medical Defense and Insurance Committee.

—Approved the action of the President in concurring with the Commissioner of Health's request by naming Doctors Blaugrund, Matthews and Weigele as a New Jersey Advisory Committee on Poliomyelitis Vaccine.

—Approved a report from the Special Committee on Blood Banks (see below).

Discharged with thanks all liaison committees, special committees, and liaison representatives other than those listed on page 477 of this JOURNAL.

—Accepted the opinion of our counsel that certain of the proposed amendments to the Constitution and By-Laws approved by the House of Delegates in April were invalid because they had been substantially changed between readings, and because they had not been submitted to the Committee on Revision of the Constitution and By-Laws prior to being sent to the Reference Committee.

—Approved the report of the Welfare Committee covering its May 22 meeting (see page 479).

—Accepted counsel's opinion that the House of Delegates could not seek to establish a standard statewide fee for Workmen's Compensation cases since the New Jersey statute provided that the fees must be based on those usually charged in local communities.

—Agreed at the request of the Veterans Administration to eliminate two night office visit items from the current contract, and with this exception authorized the President to sign the V.A. contract for the fiscal year 1956.

—Approved the sale of a small parcel of land behind the headquarters of the Society to the state government.

—Approved the appointment of a pension committee consisting of the Treasurer plus the Chairmen of the Finance and Budget Committee and House Committee. Named the First Mechanics Bank of Trenton as trustee of the pension fund.

—Approved Dr. Butler's request to reactivate a committee to make a study of the New Jersey Plan.

—Adopted a resolution requesting that patients admitted to public tuberculosis sanitoria under S. 123 be indigent or medically indigent.

Blood Bank Survey

Last year a survey was made of existing blood bank facilities. An 84 per cent return of the questionnaires was received. The returns were analyzed. It was believed that a clearing house facility for statewide use would be impracticable and would involve excessive overhead as well as difficulty in organization.

The most needed step is an interchange policy of blood, rather than blood credits. However, it would be unwise to develop this along statewide lines for some period of time. Chief obstacles are:

1. Lack of adequate integration between existing blood banks for purposes of exchange of blood.
2. Lack of uniform standards of blood collection which might permit such an exchange.

It is recommended:

1. That the Medical Society instruct the Blood Bank Commission, as already organized, to act as its agent in the following:

a. Survey of state with respect to the relation of existing blood banks to population density, making use of data now available in the questionnaires, in order to divide the state into blood bank regions.

b. Recruit the listed blood bank in each region into integration with one another on a regional basis wherein they will agree on blood exchange policies so that deficits in one hospital blood bank may be quickly made up from a member bank of the same region on an exchange basis of blood or blood credits. This would require not only cooperation on the hospital administrative level, but a development of appropriate standards of blood collection to enable member hospitals to exchange blood freely and with confidence about its quality.

c. Promulgate National Institute of Health standards of blood collection in all component hospitals of each blood bank region to the end that an interchange between different regions may become possible on a one-for-one basis. It will be necessary perhaps for one of the component member hospitals to be designated as the headquarters for each blood bank region for purposes of effecting such exchange with other regions. The same headquarters hospital would also serve as the central registry of blood collections for its own region in order that the census may be available to all member banks of the same region as well as for other regions, both in terms of deficits and of surpluses.

d. The Blood Bank Commission be empowered to confer with suitable representatives of the American Red Cross to discover how far the Red Cross may serve as a means of blood credit exchange between widely separated areas in this state and between this and other states.

These recommendations are made in the hope that any eventual development of regional blood banks independent of hospitals, as in the case of the Essex County Blood Bank, may evolve gradually along normal lines of development when the desirability of such regional blood banks becomes apparent to individual hospital blood banks. If this program evolves as expected, the subsequent development of a clearing house facility may be expedited through integration of a few regional blood banks rather than of many individual hospital banks. The principle of standardization of blood collection is our prime concern now, not only for local and regional purposes but also as a civil defense measure to provide for the emergency accumulation of large supplies of blood for exceptional needs.

Insofar as financing is concerned, the only requirement now is sufficient assistance in the way of clerical help and funds for stationery, telephone calls, and so on, to develop the program in each area and then, as conditions permit, on a statewide basis. Other expenses (financing blood collection, processing blood, and administration of blood banks) will remain as at present the responsibility of the local blood bank in each hospital and subject entirely to local determination.

SYLVAN E. MOOLTEN, M.D., Chairman

Liaison Representatives and Special Committees

1. HOUSE COMMITTEE

   Dr. L. Samuel Sica, Chairman
   Chairman, Finance and Budget Committee (Dr. David B. Allman)
   President (Dr. Vincent P. Butler)

2. VETERANS MEDICAL SERVICES COMMITTEE

   Dr. Harrold A. Murray, Chairman
   Dr. Albert B. Kump
   Dr. Luke A. Mulligan
   Dr. Irving P. Borsher, Advisor

3. CONSTITUTION AND BY-LAWS
   Dr. Royal A. Schaaf, Chairman
   Dr. Elton W. Lance
   Dr. Jesse McCall
   Legal Counsel, Advisor

4. EXECUTIVE COMMITTEE
   Chairman, Board of Trustees (Dr. C. Byron Blaisdell)
   Immediate Past President (Dr. Elton W. Lance)
   President (Dr. Vincent P. Butler)
   President-Elect (Dr. Lewis C. Fritts)
   Trustee (Dr. L. Samuel Sica)

5. MEDICAL-SURGICAL PLAN LIAISON COMMITTEE
   6 Officers of the Society
   21 county chairmen of advisory committees to M.S.P.
6. PERMANENT COMMITTEE ON BLUE SHIELD AND BLUE CROSS PLANS OF N. J.
   Chairman, Board of Trustees
   President
   Executive officer, *Ex-Officio*
   (2 representatives from M.S.P.)
   (2 representatives from H.S.P.)
7. DELEGATES, NEW JERSEY COUNCIL OF PROFESSIONS
   Member, State Board of Medical Examiners (Dr. David B. Allman)
   Chairmen, Subcommittee on Legislation (Dr. C. Byron Blaisdell)
   Subcommittee on Medical Practice (Dr. F. Clyde Bowers)
   Subcommittee on Public Health (Dr. Samuel Blaugrund)
   Subcommittee on Public Relations (Dr. Samuel J. Lloyd)
8. MEDICAL ADVISORY COMMITTEE TO N. J. CHAPTER, NATIONAL SOCIETY FOR CRIPPLED CHILDREN AND ADULTS
   Dr. Henry Briggs—Orthopedist
   Dr. Harrold A. Murray—Pediatrician
   Dr. Lewis H. Loeser—Neurologist
   Dr. Sol Parent—Internist
   Dr. John Novak—Psychiatrist
9. MEDICAL LIAISON COMMITTEES—Dental, Legal, Hospital, Nursing and Pharmaceutical
   President
   President-Elect
   Immediate Past-President
   Executive Officer, *Ex-Officio*
10. MEDICAL ADVISORY COMMITTEE TO GLAUCOMA DETECTION AND FOLLOW-UP PROGRAM, STATE COMMISSION FOR THE BLIND
    Dr. Gerald Fonda (north Jersey)
    Dr. Irvin Levy (central Jersey)
    Dr. Samuel B. Pole (south Jersey)
11. TELEPHONE DIRECTORY LISTINGS
    Dr. Marcus H. Greifinger
    Dr. Elton W. Lance
    Dr. Luke A. Mulligan
12. SPECIAL COMMITTEE ON MEDICAL TESTIMONY IN LIABILITY CASES
    Dr. Marcus H. Greifinger, Chairman
    Dr. Joseph P. Donnelly
    Dr. Albert B. Kump
    Dr. Vincent P. Butler, *Ex-Officio*
    Dr. Daniel F. Featherston, Advisor (similar committee from N. J. Bar Association)
13. NEW JERSEY PLAN
    Dr. Vincent P. Butler, Chairman
    Dr. C. Byron Blaisdell
    Dr. Lewis C. Fritts
    Dr. Albert B. Kump
    Dr. Kenneth E. Gardner
    Dr. Marcus H. Greifinger
    Dr. Royal A. Schaaf
    Dr. Joseph P. Donnelly
    Dr. David B. Allman
    Dr. Irving P. Borsher, Advisor
    Dr. Daniel Bergsma, Advisor
    Dr. Henry A. Davidson, Advisor
14. LIAISON REPRESENTATIVES:
    a. N. J. Advisory Committee on Adult and Industrial Health, State Department of Health
       Dr. Arthur F. Mangelsdorff (Nov. 1953 to Nov. 1954)
       Dr. Ralph M. L. Buchanan (Nov. 1954 to Nov. 1955)
    b. State Advisory Council on Chronic Sick (appt. by Governor June 1952)
       Dr. William H. Hahn
    c. State Crippled Children Commission (term expires 1956)
       Dr. Frederick G. Dilger
    d. State Plan for Disability Benefits
       Chairman, Special Committee on Workmen's Compensation—Dr. Frederick G. Dilger
       Industrial Health—Dr. Ralph M. L. Buchanan
    e. State Department of Health
       Dr. Samuel Blaugrund
    f. Hospital Advisory Council, State Department of Institutions & Agencies
       Dr. C. Byron Blaisdell
    g. Board of Trustees, Hospital Service Plan of New Jersey
       Dr. Vincent P. Butler (April 1955 to April 1956)
    h. Legislative Keyman to contact N. J. Congressmen in Washington
       Dr. C. Byron Blaisdell
    i. N. J. Chairman, American Medical Education Foundation
       Dr. Francis M. Clarke
    j. Blood Bank Commission
       Dr. Kenneth E. Gardner
       Dr. William T. Read, Jr.
    k. N. J. State Safety Council, Inc. (President's representative)
       Executive Officer
    l. N. J. Nutrition Council
       Dr. S. William Kalb
    m. 1955 Diabetes Detection Drive
       Dr. George Ginsberg
    n. National Conference on Physicians and Schools
       Chairman, Special Committee on School Health (Dr. Joseph R. Jehl)
    o. State Civil Defense Organization
       Dr. R. Winfield Betts
15. A.M.A. CAUCUS
    A.M.A. Delegates to caucus with officers in attendance at A.M.A. meetings—on matters of policy—position of delegates could be strengthened.
16. PENSION COMMITTEE
    Chairman, Finance and Budget Committee (Dr. David B. Allman)
    Treasurer (Dr. Jesse McCall)
    Chairman, House Committee (Dr. L. Samuel Sica)

Welfare Committee Meeting

ALBERT B. KUMP, M.D., Chairman

May 22, 1955

The reorganization meeting of the Welfare Committee was held in Trenton on May 15 with 38 of the 62 members present and 18 others for a total attendance of 56.

The following reports of the special and subcommittees were received and acted upon.

CANCER CONTROL

The aim of the Special Committee on Cancer Control for 1955-56 will be chiefly to perfect cancer clinics that have already been organized, and to establish new clinics that may seem to be needed. It is not the thought of the committee that there necessarily must be a cancer clinic in every hospital, but rather that it should depend entirely upon the public need in that particular vicinity. It is hoped that there will be a cancer clinic available to all the citizens of New Jersey within a radius of twenty-five to thirty miles by the end of this fiscal year.

It is also one of the aims of the committee to establish a Cancer Registry in connection with the cancer clinic with as little expense as possible to the hospital or cancer clinic.

The Welfare Committee accepted the report of the Special Committee on Cancer Control.

MATERNAL WELFARE

The Special Committee on Maternal Welfare will continue its work of classifying maternal death reports throughout the state as submitted by the field physicians. It will continue its pilot study of neonatal deaths, and hopes to have a final report ready by the end of the year.

The Welfare Committee accepted the report of the Special Committee on Maternal Welfare and approved the Revised Standards for Obstetrical Departments (see page 482).

Recommendation: That the Revised Standards for Obstetrical Departments, formulated and recommended by the Special Committee on Maternal Welfare, be adopted by The Medical Society of New Jersey; and that these Standards be printed and sent to all New Jersey Hospitals. (*Approved**)

PUBLIC HEALTH

The Special Committees on Chronically Ill, Conservation of Vision, Routine Health Examination, and School Health will continue their work on the programs carried over from last year.

The Special Committee on Conservation of Hearing and Speech submitted the following recommendations:

1. To activate the approved program of last year—establishing Hearing and Speech Research Centers in Trenton and Atlantic City to work with the Newark Center.
2. Establishment by county societies of committees for the conservation of hearing and speech to coordinate and effectuate at county level the programs of the state committee.
3. More intimate cooperation between the Special Committee on the Conservation of Hearing and Speech of The Medical Society of New Jersey and the Special Committee on School Health for the purpose of more fully realizing their respective objectives.
4. That conference be arranged between representatives of this committee and the State Department of Institutions and Agencies to explore the possibility of obtaining financial support for our program under the 1954 amendments to the Hill-Burton Act.

The Welfare Committee accepted the report of the Subcommittee on Public Health to this point and approved the above recommendations.

Recommendation: That the recommendations of the Special Committee on Conservation of Hearing and Speech be approved. (*Approved**)

New Jersey Poliomyelitis Advisory Committee—The National Poliomyelitis Advisory Committee is expected to allocate to each state a proportionate share of the total poliomyelitis vaccine produced by the various manufacturers.

A New Jersey Poliomyelitis Advisory Committee was recently appointed to assist in the allocation and distribution of the vaccine within the state. The advisory committee, upon being informed by the Department of Health of the share of vaccine available to New Jersey, could advise the Department on the amount to be purchased with state appropriated funds and the amount to be made available to physicians through the usual commercial channels for biologicals.

The state purchased poliomyelitis vaccine will be placed in established distributing sta-

*By The Board of Trustees.

tions. At these locations physicians may obtain the vaccine without cost to themselves or their patients, but they are privileged to charge for its administration. This method of distribution has been found to provide for those unable to pay for the vaccine as well as the fee for its administration.

To assure an equitable distribution of vaccine to children in the most susceptible ages, it is recommended:

1. That the vaccine available at distributing stations and at commercial sources be used exclusively on children of five years through nine years until it has been determined that enough has been distributed to immunize the children in that age group.
2. Following the announcement of the completion of part one, physicians should next extend the immunization program through ages four, three, two, and one years successively. The completion of this second part of the program will again be announced to physicians.
3. Should the vaccine continue in critical supply, it is recommended that physicians next limit the immunization program to children under ten years and older, and then to pregnant women.
4. It is also recommended that every effort be made by physicians and others to urge the cooperation of parents in observing the above restrictions until the supply of poliomyelitis vaccine is ample to meet all needs.
5. It is suggested that physicians record the name of individuals injected, age, date of injections, manufacturer, and lot number.
6. It is suggested that physicians obtain and use poliomyelitis vaccine from their regular sources, declining to use vaccine which may be brought to them by their patients. Vials which have contained vaccine should be destroyed.

The Welfare Committee approved this portion of the subcommittee report.

Recommendation: That the recommendation of the New Jersey Poliomyelitis Advisory Committee be adopted by The Medical Society of New Jersey. (*Approved**)

LEGISLATION

A-261 — Mintz — Provides that hospitals, physicians or dentists rendering services to a person injured as a result of an accident, aggregating over 25 per cent of any award, judgment or settlement to such injured person, each have a lien for its or his proportionate share of such percentage; effective July 1, 1955. *Disapproved.*

A-371 — Jamieson — Permits the removal from an institution for mental patients of individuals held under pending criminal process when they are in a state of remission and free of symptoms of the mental disease which required original transfer to such institution, instead of requiring that they be certified as "cured." *Approved.*

A-380—Savino—Requires the election of coroners only in those counties where no county physician or chief medical examiner has been appointed; eliminates provisions requiring the county coroner to act as the county physician when such office is vacant or unfilled. *Disapproved.*

A-393—Barnes, Kurtz—Prohibits as disorderly conduct the possession of or the selling, or giving to any person other than a licensed physician, dentist, veterinarian, undertaker, nurse, podiatrist, registered pharmacist, or hospital sanitarium, clinical laboratory or other medical institution or regular dealer in medical dental or surgical supplies, a hypodermic syringe, needle or instrument for the use of narcotic drugs by injection without written prescription of a physician, dentist or veterinarian; requires prescription contain specific information and be retained for 2 years; requires such prescription be void after 6 months. *Disapproved.*

A-445—Waddington, Kurtz — Requires the State or county to pay for any medical examination required relative to the care and custody of children under the Home Life Law (P.L. 1951, c. 138); authorizes the State Board of Child Welfare to consent to an operation, anesthesia, diagnostic tests or treatment for a child receiving such care when the parent or guardian is not available. *Approved.*

A-464—Barnes—Requires the State to pay specified hospital, medical and surgical expense benefits to all persons holding office, position or employment in the State service. *Disapproved.*

A-466—Beadleston—Eliminates the requirement that 5 old school, 1 eclectic, and 3 homeopathic physicians shall be included among the 9 physician members of the State Board of Medical Examiners. *Approved* (Medical Society bill).

A-478—Werner—Establishes State Medical, Surgical and Hospital Insurance fund for payment up to specified maximums of medical and hospital expenses of employees and their dependents for injuries or illness not covered by Workmen's Compensation benefits; to be financed by employer and employee contributions based on 2½ per cent of wages; contributions to become effective January 1, 1956,

and benefits to become payable January 1, 1957. *Disapproved.*

S-281, S-284, S-285, SCR-14, SCR-16, SJR-7, A-497, ACR-27—All pertain to Salk Vaccine. *No Action.*

S-195, S-196, S-197—companion bills — Shershin—Deems any condition or impairment of health of paid firemen and permanent policemen caused by hypertension, heart disease or tuberculosis to be an occupational disease. *Disapproved.*

S-230—Shershin—Admits to the examination for a license to practice chiropractic an applicant who is a veteran, who has completed lectures during 4 years at a legally incorporated chiropractic school, who has resided in the state for 3 years and who has engaged in the practice of chiropractic for 4 years. *Opposed.*

S-292—Lance, Shershin — Authorizes and directs the Commissioner of Health, State Department of Health, to purchase as soon as available, sufficient Salk anti-polio vaccine to innoculate all children of the State between the ages of 1 and 10 and for whom free vaccine is not available through the auspices of the National Foundation for Infantile Paralysis; requires same be made available for free distribution to children whose parents desire same; appropriates $500,000 for such purpose. *Approved.* (This bill has been prepared under the supervision of the Commissioner of Health. It appears to the subcommittee that the measure satisfactorily embodies the recommendation made by the Board of Trustees on April 16 that funds be provided by the state to purchase Salk vaccine for distribution to the children of indigent and medically indigent families. The subcommittee recommends that the Commissioner of Health be told that our approval is based upon the assumption that such regulations as he promulgates will not go counter to the established practices of medicine.)

The Hudson County Medical Society had asked the subcommittee to exert its influence to have clinics and treatment centers under the jurisdiction of the State Department of Institutions and Agencies. The subcommittee took no action on the request inasmuch as ACR-30 and AJR-7 would establish a commission to study and investigate such charitable and philanthropic fund raising activities as it shall determine to be necessary, and to formulate legislation to protect the public, and legitimate charitable and philanthropic fund raising programs; requires report to the Legislature.

The Welfare Committee approved the report of the Subcommittee on Legislation. (*Approved**)

MEDICAL PRACTICE

The Special Committee on Industrial Health, for the present, will work in close cooperation with the Special Committee on Workmen's Compensation.

The Special Committee on Workmen's Compensation will study (1) the matter of unethical medical testimony in compensation cases; and (2) the matter of fees in compensation cases.

A special group has been appointed within the subcommittee to draw up a definition of the Corporate Practice of Medicine, and to further analyze the questionnaires on the subject.

The Welfare Committee approved this portion of the subcommittee report and the recommendation re privileged communication.

Recommendation: That privileged communication be extended to the physicians of New Jersey and that legislation to this end be proposed. (*Approved**)

A referral from the President re Relationship Between Optometry and Medicine will be studied by a special group of the subcommittee jointly with representatives of the Subcommittee on Legislation.

A communication from the Essex County Medical Society called attention to what that county felt to be an inadequate fee for the general basic medical examination, including laboratory services, of cases under the jurisdiction of the New Jersey Rehabilitation Commission. The present fee is $5.00. The subcommittee recommends that the fee be amended to:

Physical Examination	$5.00
Urinalysis	$1.00
Blood Serology	$1.00
Complete Blood Count	$3.00

The Welfare Committee approved the suggested amended fees for examination of Rehabilitation cases.

Recommendation: That the proposed fees for examination of cases of the New Jersey Rehabilitation Commission be adopted by The Medical Society of New Jersey. (*Approved**)

PUBLIC RELATIONS

The Subcommittee on Public Relations received the recommendations of the House of Delegates and will in the course of the succeeding months deal with them. It also took

cognizance of the fact that the House approved two recommendations contained in the committee's annual report.

The committee has agreed that the regular publications are to be continued in the forthcoming year.

The projects for the year will be:

1. Production of the proposed "Membership Guide Booklet."
2. Preparation of formal indoctrination procedures for new members to be offered for adoption by county societies.
3. Representatives of the subcommittee to meet with representatives of the New Jersey press for the purpose of evolving a set of recommended principles and procedures to govern members of the medical profession in New Jersey in their dealing with the press and other media of public information.

The subcommittee recommended that throughout the year county societies be encouraged to activate and maintain the eight-point program for public relations proposed and approved by the A.M.A.

The Welfare Committee approved the report of the Subcommittee on Public Relations and the recommendation on the A.M.A. program.

Recommendation: That the recommendation of the Subcommittee re the A.M.A. eight-point program be approved. (*Approved**)

Revised Standards — Obstetrical Department

1. Doctors and nurses observing or examining a patient in active labor should wear uniform and mask. All persons in the delivery room should wear uniform and gown, also mask and head covering.

2. Rectal and vaginal examinations should be made only when necessary to guide management of labor. For vaginal examinations the patient should be prepared as for delivery and the doctor must dress and scrub as for delivery.

3. Pituitary derivatives prior to delivery should be ordered only where definite indications exist for their use. Such indications should be recorded on the patient's hospital chart. A physician should be in attendance during the administration.

4. Consultation with a competent consultant (preferably a member of the obstetrical staff of a hospital approved by the Joint Commission on Accreditation) is required in the following cases:

a. Where induction of labor seems to be indicated.
b. Where stimulation of labor by pituitary derivatives is indicated.
c. Before caesarean section.
d. Before all other operative deliveries except outlet forceps and episiotomy.
e. In all breech presentations at or near term.
f. In all cases of toxemias.
g. In all cases of abnormal vaginal bleeding.
h. Where there is a history of previous uterine surgery.

5. A signed report by each consultant must be on a special consultation sheet on the patient's hospital chart.

6. All cases of infection must be isolated from the Maternity Section.

7. Interns should scrub up and assist for private as well as ward deliveries if possible.

8. A qualified obstetrical nurse should be present at all times in the maternity unit. This nurse may perform rectal examinations.

9. Anesthesia by untrained personnel to be discouraged.

10. Facilities for suction and resuscitation of infants and adults should be available in the delivery room at all times.

11. Facilities should be available for immediate transfusion at any time.

12. Provision should be made for continuous observation of patients for at least one hour post-partum.

Formulated by the
Maternal Welfare Committee of
The Medical Society of New Jersey

Adopted by the Society May 22, 1955.

Tribute to Dr. David W. Green

The following item appeared in the July 7, 1955, issue of the Salem Standard and Jerseyman of Salem, N. J.:

On July 3, 1955, Salem lost a beloved physician. I cannot say, "I'm sorry he's dead," but rather, "I'm glad he lived". For during his sixty-three years he left a mark of remembrance on many a person's heart—a live baby to a worried mother, a stern but bracing answer to a woman who doubted if she could bear her husband's death, a word of advice to a fellow physician, a correct decision at a difficult operation, a silent nod when others would have lost their tempers—these and many other remembrances of Doctor David Wright Green will long live with us.

I knew him a bare seven years, but he treated me like a father. He was not always easy to understand, but he was always willing to give good advice. Our opinions occasionally differed, but I respected his, and he respected mine. Rarely was his clinical judgment wrong. What we younger physicians learned from books, he knew from experience.

Here was a doctor who practiced the unwritten beatitude: "Blessed is the man whose work is his hobby." As far as I know, he never took a regular "day off" like the rest of us. His office hours were not once or twice daily, but morning, afternoon, and evening—six days a week! He accomplished more with the least amount of visible effort than any doctor I know. He never ran, and rarely walked fast. He had that quality of "imperturbability" which Sir William Osler described as "coolness and presence of mind under all circumstances, calmness amid storm, clearness of judgment in moments of great peril, immobility, impassiveness, or to use an old and expressive word, *phlegm*.

His bearing was stately; his dress was impeccable—hot weather did not force him to take off his coat. He wore a tie even if awakened in the early morning hours. Only once did I see him smoke a cigarette without his famous holder. And only once did I see him with his hair mussed—that was after a grueling hour in the dentist's chair (even then he was loath to admit it hurt). Here, indeed, was a man with a granite character!

When I came across Bishop Henson's description of an Ideal Physician, I was amazed at the resemblance to Dr. Green: "He is generally regarded with respect. It is not merely that his distinctive service is indispensable, and is universally required, but also that he commands the public confidence in a very notable degree, and has behind him a tradition of professional behaviour which is generally admired. It is assumed that he will be adequately trained; that he will be entirely honourable; that he will be patient, considerate and assiduous; that he will be generous and even-minded, giving his service as frankly and fully to the poorest as to the richest of his patients; that he will be, in a quite astonishing measure, disinterested. We expect the doctor to be something more than a scientific specialist, skilled in his specific branch of work. We look for education and good manners. He must be welcomed in society for his own sake."

As welcome as Dr. Green was in Salem, he is no longer with us. But many fond memories will live on in the hearts of his patients and friends. We can only say that we are glad he walked this way.

JOHN STANGER MADARA, M.D.

Self-Help Devices for Arthritics

The past few years have focussed attention on self-help devices for the arthritic in enabling him to meet the demands of daily living. The Arthritis and Rheumatism Foundation has made a grant to implement a central office for the collection, evaluation, development, and dissemination of information concerning self-help devices for the arthritic. The Center will be in the Institute of Physical Medicine and Rehabilitation of New York University-Bellevue Medical Center, 400 East 34th Street, New York 16, New York.

Primary purpose of the Arthritis Self-Help Office is to provide, without cost, information on self-help devices. It will also offer free consultation to arthritic patients by mail, telephone, or through personal interview.

Patients or physicians who have developed self-help devices are urged to submit them for testing and evaluation so that they may be made known to other patients.

Obituaries • • •

DR. VINCENT R. CAMPANA

One of the New Jersey founders of the American Academy of General Practice, Dr. Vincent R. Campana, died in Jersey City on July 15 at the age of 48. He had received his M.D. degree from Hahnemann in 1931 and shortly thereafter became affiliated with the St. Francis Hospital, the Margaret Hague and the Jersey City Medical Center. Dr. Campana was a general practitioner who spent his entire professional life in Jersey City. He was active in the Hudson County Medical Society.

DR. DAVID S. CAREY

On July 17, death closed the long and active medical career of Dr. David S. Carey. Born in Bridgeport, Connecticut in 1886, Dr. Carey received his M.D. from Fordham in 1909. He first migrated to Texas where he practiced until 1915. He then came to New Jersey, and here he remained except for his period of military service in World War I. For years he served as Freehold's chief school physician and he was surgeon to several of Monmouth County's public institutions. He was active in Elks and at one time was the chief executive of the Freehold lodge. Dr. Carey was also active in the affairs of the Monmouth County Medical Society.

DR. DAVID W. GREEN†

Salem County lost its most distinguished physician with the death on July 3 of Dr. David W. Green. Dr. Green was born in Salem in 1891, and was graduated from the medical school of the University of Pennsylvania in 1915. After interning at the Easton (Pa.) Hospital he returned to his native city. At the outbreak of the war, he was commissioned in the medical corps of the U. S. Army, later detailed to the British Army. In 1919 he was decorated by King George V "for valor displayed while serving in the medical corps in France."

On being demobilized he returned to Salem where he built one of the largest practices in South Jersey. For years he was Chief of Staff of the Salem County Memorial Hospital, and became Chief-emeritus on his retirement from active hospital organizational work. He was a Fellow of the American College of Surgeons, a director of the Salem National Bank, and had been president of both the Salem County Medical Society and Salem County Health Association.

Dr. Green was active in the affairs of The Medical Society of New Jersey. He was on the Welfare Committee from 1934 to 1940 and, for more than 13 years (until 1953) he served as a Trustee.

DR. CHARLES A. KEATING

A medical career which extended to before the turn of the century was ended on July 17 with the death that day of Dr. Charles A. Keating. Born in Paterson in 1875, Dr. Keating was graduated from the Jefferson Medical College in 1898. He returned to his native city on completing his internship and did general practice in Paterson from 1899 to 1917. He then entered the Medical Corps of the Army and served as a Captain throughout World War I. On being mustered out, Dr. Keating returned to Paterson where he conducted his family practice from 1919 until 1954. At one time, Dr. Keating was the Assistant County Physician, Passaic County.

DR. JOSEPH F. LONDRIGAN, II

Dr. Joseph F. Londrigan, II, died on August 1 at the age of 46. He was the nephew of the late Joseph F. Londrigan, former President of The Medical Society of New Jersey. Dr. Joseph F. Londrigan, II was born in Hazleton, Pennsylvania, and came to our state in childhood. After being graduated from St. Peter's Preparatory School in Jersey City, he attended St. Louis University receiving there his B.A. and M.D. degrees. He then returned to Hoboken where he interned at St. Mary's Hospital. He was subsequently active on the associate surgical staff of that hospital and in the affairs of the Hudson County Medical Society.

DR. WILLIAM LUTZ

At the early age of 44, Dr. William Lutz, senior anesthesiologist at the Orange Memorial Hospital, died on July 7. Born in Sunbury, Penna., he was graduated from the Jefferson Medical College in 1935. He interned at the Memorial Hospital in Orange, N. J. and remained in this state ever since. After a residency in anesthesiology at the Memorial Hospital and after some years of graduate study, he entered the private practice of that specialty, and eventually became senior anesthesiologist at the Orange Memorial Hospital.

†Also see page 483.

DR. CHARLES NEAL

One of New Jersey's senior practitioners died on June 11, with the passing on that day of Dr. Charles Neal of Millville. Born in Long Branch in 1867, Dr. Neal received his M.D. from the University of Pennsylvania in 1890, and while attending medical school in Philadelphia he learned to know—and like— South Jersey. So for more than 60 years, Dr. Neal served the people of Cumberland County. He was, for a while, a member of the Millville City Council. Dr. Neal never owned an automobile and made his calls and rounds in a horse and buggy until his retirement from practice. Dr. Neal was, for many years, active in the affairs of the Cumberland County Medical Society.

DR. RICHARD H. SEELY

Dr. Richard H. Seely, Trenton ophthalmologist, died July 22 at the age of 34. Born in Trenton in 1921, Dr. Seely was graduated from the Jefferson Medical College in 1945. He interned at St. Francis Hospital in Trenton, spent two years in the Army Medical Corps, and then did graduate work in ophthalmology at the University of Pennsylvania, later at the Wills Eye Hospital. In 1950 he entered private practice of ophthalmology. He was on the ophthalmological staffs of both the Wills Eye Hospital and the St. Francis Hospital in Trenton.

DR. LOUIS A. STEIN

Dr. Louis A. Stein, chief of the Ophthalmology and Otolaryngology Service of Trenton's McKinley Hospital, died suddenly at that hospital on July 17. He was graduated from the New York Medical College in 1916, he interned in the McKinley Hospital in Trenton the following year and remained affiliated with that institution ever since. He was a founder of the Adath Israel Synagogue in Trenton and at one time was president of the medical staff of the McKinley Hospital.

DR. LLOYD N. YEPSON

An Honorary Member of The Medical Society of New Jersey, Lloyd N. Yepson, Ph.D. died on August 2 at the New Jersey State Colony, New Lisbon, where he was superintendent. Born in Illinois in 1897, he received a Ph.D. in educational psychology at Ohio State University. He devoted all of his professional life to the interests of retarded children. He first came to New Jersey in 1921 where he developed a research program for the training school at Vineland, N. J. The next two years he spent in Chile, at the request of the government there, to establish clinics for retarded children. In 1931 he returned to New Jersey and here he remained until his death. He was chief psychologist at Greystone Park from 1931 to 1934, and Director of the Division of Classification in our State Department of Institutions and Agencies from 1934 to 1951. Since then he served as superintendent of the State Colony. He was made an Honorary Member of The Medical Society of New Jersey in 1953. His alma mater conferred on him the honorary degree of Doctor of Laws in 1942.

Nitrogen Mustard in Cancer

As McCarthy (New England Journ. Med. 252:467, April 1955) puts it, the tragedy of cancer is not just the lack of a cure but the inability of medical science to consistently provide palliation. In an attempt to improve the latter aspect the author administered nitrogen mustard plus ACTH or cortisone to 100 hopeless cancer patients. "Cures" were neither expected nor sought but it is interesting to note that in 16 patients subjective and objective response was striking and often accompanied by temporary tumor regression or arrest. Fortunately, prolongation of life occurred only in those patients who experienced good palliation.

All patients were hospitalized and placed on a low-salt, high protein diet. ACTH or cortisone therapy was started immediately, at least 12 to 18 hours prior to first nitrogen mustard infusion. ACTH dosage: 60 to 80 units every six hours throughout treatment period. Dosage then gradually reduced. Cortisone dosage: 300 to 450 mg. daily in divided doses. Patients maintained on 100 to 200 mg. dosage daily after discharge. Nitrogen mustard dosage: 0.1 mg./Kg. body weight for a total of 0.5 mg./Kg. body weight over a 5-day course of treatment. Patients who responded favorably to initial treatment were given a second and third course of therapy at monthly intervals.

Announcements • • •

New N. J. Fellows: ACCP

The annual Convocation of the American College of Chest Physicians was held in Atlantic City, New Jersey, on June 4. Certificates of Fellowship were awarded to 251 members from 42 states, 5 provinces of Canada, and Brazil, India, Korea, and the Philippines.

The following physicians from New Jersey received their Fellowship certificates:

Robert B. Durham, Atlantic City
James S. Eisenhower, Jr., Wildwood
Bernard Eisenstein, Englewood
Lawrence Gilbert, Newark
George C. Glinsky, Newark
Gerard O. Helden, Hackensack
Alfred R. Henderson, Asbury Park
Saul Lieb, Newark
Sanford A. Luria, Teaneck
Mervin G. Olinger, Verona
C. J. Scarpellino, Red Bank
Ross J. Simpson, Bayonne
William A. Tansey, Short Hills
Coler Zimmerman, East Orange

Prize for Thyroid Essay

The American Goiter Association offers an award of $300 and two honorable mentions for the best essays concerning original work on problems related to the thyroid gland. The award will be made at the annual meeting of the Association, Chicago, May 3, 1956. The essays may cover either clinical or research investigations, should not exceed 3000 words and must be in English. Duplicate typewritten copies, double spaced should be sent to Dr. John C. McClintock, 149 Washington Avenue, Albany, New York, not later than January 1, 1956.

Graduate Courses in Philadelphia

Graduate Courses in allergy, cardiology, dermatology, arthritis, hematology, electrocardiography, and "Advances in Medical Practice" will be given at the Einstein Medical Center, Philadelphia 47, Pa.

Gastroenterologic Convention

The American College of Gastroenterology will meet in Chicago, on October 24 to 26. In addition to many practical papers on gastroenterology and allied fields, the program will include a panel discussion on "Peptic Ulcer" with Dr. Clifford J. Barborka as moderator.

A course in gastroenterology, under the personal direction of Dr. Owen H. Wangensteen and Dr. I. Snapper, will be given on October 27, 28 and 29, 1955, at The Shoreland.

The scientific sessions on October 24, 25 and 26 are open to all physicians without charge. The Graduate course will only be open to those who have matriculated in advance.

Copies of the program and further information may be obtained from the American College of Gastroenterology, 33 East 60th Street, New York 23, N. Y.

Psychosomatic Meeting

The Academy of Psychosomatic Medicine will meet on October 6, 7, and 8, 1955, at the Plaza Hotel in New York City. Subject of this year's program is "The Psychosomatic Aspects of Drug Administration".

Speakers include: Lester L. Coleman, M.D., who will talk on "Wonder Drugs—A Psychosocial Phenomenon"; Harry Kozol, M.D., discussing "Epilepsy"; George B. Koelle, M.D., presenting "The Clinical Neuro-pharmacology of Mescaline and D-lysergic Acid"; Joseph E. F. Riseman, M.D., commenting on "Experiences with Placebos in the Treatment of Angina Pectoris"; Mark D. Altschule, M.D., presenting "Ideas About the Metabolism of Epinephrine".

A preliminary program can be obtained from Dr. Ethan Allan Brown, 75 Bay State Road, Boston, Massachusetts.

Annual Psychiatric Institute

On September 21, the 3rd Annual Psychiatric Institute will be held at Princeton. The theme is: emotional disorders in children. Details may be obtained from Robert S. Garber, M.D., box 1000, Princeton, N. J.

Names, Titles, Degrees

Some doctors prefer the form "Robert A. Smith"; others use "R. A. Smith" and some insist on "Robert Alexander Smith." The editor will usually follow your preference. It is customary to use full first names for women doctors, and for men who possess a common surname like Smith, Brown or Jones. First names are not abbreviated. Thus "Rob't Smith," "Jas. Jones," and "Thos. Williams" are objectionable. Type your name the way you want it printed. Best procedure is the conventional full first name, middle initial, full last name. Physicians who habitually sign themselves by the first initial and full middle name are expected to do the same in writing a paper, as "H. Alexander Smith."

Most journals prefer the suffix "M.D." to the prefix "Dr." Physicians are far from being the only doctors in the world. The reader wants to know whether the paper is written by a doctor of medicine, a doctor of dental surgery, a doctor of philosophy, a doctor of science or a doctor of divinity. It is not American practice to write "by Professor John Smith."

It is poor form to write B.A., M.D., or even M.S., M.D. Since there is no degree in the world higher than M.D., the other initials contribute nothing to your authority, however much they contribute to your vanity. On rare occasions the secondary degrees are used. A paper on a technical subject in chemistry or pharmacy may enjoy an aura of greater authority if it appears that the author is an M.Sc. in chemistry or a Ph.G. as well as a doctor of medicine. The rule of the American Medical Association press is to include additional doctor's degrees if the author uses them, but not to list master's or bachelor's degrees. So "John Smith, M.D., Ph.D" would be acceptable to that press. However, this JOURNAL considers it an affectation unless some very specific purpose is served. Thus, a physician who was also a dentist and who wrote a paper on oral surgery would be justified in having himself styled "Harold Brown, M.D., D.D.S." If his paper dealt with the treatment of ringworm of the toes, the D.D.S. would be purposeless.

Medical school and hospital affiliations are usually omitted from the author's name, except on the title page of a book. Before spending his money to buy a book, the potential reader wants to know the author's qualifications. But no one buys a single issue of a journal (as a rule) to get one article. Usually the journal has a captive audience. A journal article, therefore, has to stand or fall on its own merits and not on the honors which decorate the author's name. For this reason, academic and hospital titles are not affixed to the author's name when he submits an article to a medical journal. There are some exceptions to this. For example: a paper on medical education written by the dean of a medical school should carry the dean's designation after the author's name. If the paper concerns an obscure tropical disease, it is appropriate for the author to indicate that he is an instructor in tropical medicine. Also, a commencement talk, a funeral oration, a memorial lecture—material of this sort is usually embroidered with the honors of the author. In general, titles are desirable when the subject is obscure or when it concerns some ordinarily rare disorder which, by reason of the author's status, has come to his attention. Thus, any doctor might write a paper on epilepsy. However, if you are reporting results of treating five thousand epileptics, it is proper to place after your name "Medical Director of the So and So Village for Epileptics" to make clear, from the beginning, how you have accumulated so many cases of such a relatively uncommon disorder. A speech delivered on a special occasion is usually footnoted to indicate the occasion so the titles and honors are not necessary after the author's name. For instance, an inaugural talk by the newly elected president of a specialty society is ordinarily keyed to a footnote reading "Talk delivered on the occasion of the author's inauguration as president of the—," hence the presidential title is unnecessary at the top of the manuscript.

Some journals devote a special paragraph to listing the author's honors and professional biography. If you are sending your manuscript to one of these publications, examine the pages to see how this is done, and include your

biography in the letter of transmittal accompanying the manuscript.

Suppose you are an F.A.C.P., and F.I.C.S., or possess some other honorable handle to your name. Do you include that as part of your author's designation? Practices vary. Most journals omit these titles, and this JOURNAL omits them too. The reason is simple. If the article is poor, it will not be rescued by a dozen titles, degrees or honors affixed to the author's name. And if the article is good, it stands up, even though the author can boast of nothing but a simple M.D. That is bouquet enough for any medical paper.

If in doubt as to the advisability of listing honors or titles, here is what to do. Omit them from the typed manuscript. The editor can insert them easier than he can delete them. Then, in your transmittal letter you can furnish this information.

HENRY A. DAVIDSON, M.D.,
Editor of The Journal.

County Society Reports • • •

Gloucester

The regular monthly meeting of the *Gloucester County Medical Society* was held at the Woodbury Country Club on May 19, with the President, Dr. John L. Laurusonis, presiding. The program committee presented Dr. A. E. Rakoff, Clinical Professor of Obstetrical and Gynecologic Endocrinology, Jefferson Medical College whose subject was "Obesity as Seen by the Endocrinologist."

At the business session the following officers were elected: President—William Beall; Vice-President—Chester Samuelson; Secretary — Dorothy Rogers; Treasurer—Francis Brower; Historian — Dorothy Rogers; Reporter—Roger Lovelace; Trustee—Chester Ulmer; Censor—William W. Pedrick; Delegate to State Society—William Beall; Alternate Delegate—Herman Wright. Following installation of the new officers, the incoming president, Dr. Beall, made committee appointments for the following year.

ROGER D. LOVELACE, M.D.
Reporter

Middlesex

The annual dinner meeting of the *Middlesex County Medical Society* was held at Oak Hills Manor, Metuchen, June 15, at 6:30 p.m.

Following a delicious steak dinner, Dr. Charles H. Calvin, chairman of the Program Committee, presented Dr. Stanley Jaks, whose subject was "Curiosities of the Mind." Dr. Jaks gave a remarkable demonstration of mind reading and his ability to duplicate signatures while blindfolded was uncanny.

The following were elected to regular membership from associate membership: Drs. Morton M. Klein, Perth Amboy and Jack A. C. King, Metuchen. Drs. John P. Cryan and Margaret Delaney, East Brunswick, were elected to a two year period of associate membership.

The report of the treasurer, Dr. Kohut, was read by Dr. Dunham and accepted as read.

The following slate of Officers, Delegates and Alternates, Trustees and members of the Judicial Medical Ethics Committee was proposed by the Nominating Committee, Dr. E. J. Brezinski, Chairman, and was unanimously accepted:

President—Joseph F. Sandella, New Brunswick, Vice-President—Sidney D. Becker, Keyport, Secretary—S. David Miller, New Brunswick, Treasurer—George J. Kohut, Perth Amboy, Reporter—Alfred J. Barbano, New Brunswick.

Board of Trustees—Malcolm M. Dunham, Woodbridge, H. P. Fine, Perth Amboy, J. J. Mann, Perth Amboy, W. E. Sherman, New Brunswick, Marshall Smith, New Brunswick, Charles H. Calvin, Perth Amboy, Howard Dieker, South River, Joseph H. Kler, New Brunswick, J. H. Rowland, New Brunswick.

Judicial Medical Ethics Committee—B. F. Slobodien, Chairman, Perth Amboy, M. M. Dunham, Woodbridge, E. J. Brezinski, Perth Amboy, for 2 years; F. M. Hoffman, New Brunswick, C. R. Toy, New Brunswick, for 1 year.

Delegates and Alternates—Term expiring in 1958: F. M. Clarke, E. F. Klein, H. T. Weiner, F. S. Taber, M. B. Jacobson, Howard Joselson.

Nominating Delegate and Alternate: John H. Rowland, Edward F. Klein.

Dr. Malcolm M. Dunham, retiring president, then passed the gavel to Dr. Joseph F. Sandella. In his acceptance speech, Dr. Sandella mentioned the increase of membership to nearly 300 members and stressed the importance of attending the monthly meetings of the Society and the opportunity of becoming acquainted with the new members. He also made a plea for the individual expression of opinions at the meetings.

Dr. Calvin suggested that consideration be given to a proposal that a token of recognition of service be presented to past presidents at future annual meetings.

I. N. SMITH, M.D.
Reporter

Book Reviews • • •

Many of the reviews in this section are prepared in cooperation with the Academy of Medicine of New Jersey.

Sports Injuries. By Christopher Woodard, M.D. Los Altos, California: Track and Field News. 1955. Pp. 128. With 44 photographs of exercise postures. ($3.00)

The traditional treatment for injuries is usually passive: strapping, massage, immobilization and heat. This, says Dr. Woodward, is all wrong. The author has been consultant to the British Olympic teams and has had rich British experience in sports injuries. He prefers active treatment in order to prevent adhesions. He illustrates the exercises needed for active treatment after an injury as well as those needed to "keep muscles in tone." He also delivers numerous obiter about the health of athletes. For example, he says that boils are a sign that the blood is overheated. For this, an auxiliary remedy is to "take salts." He warns against tea, coffee and even against too much milk. Beer in moderation and wine "as much as you like" is his prescription. To help keep that athlete in tip-top shape he recommends a concentrate of ox liver. This, he says, tunes up the athlete's liver and puts him at an advantage over athletes who do not drink concentrate of ox liver. The author then reviews injuries topically and tells how to give active treatment. The book, it is explained, is intended not for physicians, but for masseurs, trainers and coaches.

ULYSSES M. FRANK, M.D.

Pomp and Pestilence. Ronald Hare, M.D. New York 1955. The Philosophical Library. Pp. 224. ($5.75)

When you come to think of it, it is surprising how much trouble micro-organisms can cause. Infections have changed the course of history. In the 20th century, influenza put 21 million people to death. In the 14th century, the Black Plague wiped out half the human race. Malaria is the number one cause of death today. Until this century, half of all adult deaths and three fourths of all child deaths were due to infections.

In this short (and somewhat overpriced) book, Dr. Hare tells the story of the origins, spread and —hopefully—conquest of infectious diseases. Apparently, in spite of its 1955 dateline, the book was written long ago, since there is only casual mention of chemotherapy and antibiotics, and this reference is loosely tacked on to the main text — either an afterthought or a later addendum. However, the story is interesting in its own right, and Dr. Hare tells it well—though without dramatics. The binding, unfortunately is somewhat shoddy, and the references and footnotes are inaccessibly placed in the back of the book, the citation numbers being confusingly repeated for each chapter. In spite of all this, the text is readable. This is a good reference work for any physician called on to talk to non-medical groups. Each major infectious disease is separately and lucidly treated.

VICTOR HUBERMAN, M.D.

Review of Medical Microbiology. By E. Jawetz, Ph.D., and E. A. Adelberg, Ph.D. Pp. 360. Los Altos, California, Lange Medical Publications, 1954. ($4.50)

This extraordinary volume is bound with heavy paper and lithographed rather than printed which accounts for its relatively low cost. It is a concise presentation of microbiology, so compiled that any reader interested in any aspect of the subject from basic science to the intricate details involved in measuring the size of viruses, can do so simply and quickly. The sentences are short and the paragraphs so contructed that in many places the reader receives the benefit of a synopsis without excessive bacterial metabolism and the variations and classifications of bacteria. There are sections on host-parasite relationships and a very thorough dissertation on antigens and antibodies. One chapter is devoted to chemotherapy, covering drug resistance and the clinical use of antibiotics.

The bacteria themselves are brought together in such a manner that it becomes relatively simple to study them. For example, in Chapter 12, "Pyogenic Cocci," the staphylococci, streptococci, pneumococci and the neisseriae are grouped together. Chapter 16 covers the coliform and proteus groups, salmonellae, shigellae and vibrios. Such a classification is practical and of great value to students as well as clinicians. The chapter on medical mycology is well planned. Chapter 22 covers succinctly the clinical approach to diagnostic problems and even suggests the way reports should be presented by the laboratory.

The virus diseases are taken up in considerable detail although in such a concise manner that it is not difficult to read and review. Each virus disease is developed not only from the biologic standpoint of the causative agent but the pathogenesis,

pathology, laboratory and clinical findings are also discussed.

This is an excellent study book for the student of medical bacteriology, a refresher for the House Officer and a means for rapid review of the latest concepts for the practicing clinician. All readers should find its unusual style and presentation of interest. It affords in one inexpensive volume a rapid and accurate survey of a subject which in the light of recent developments of viruses and in the study of antibiotics has become more important than ever before. The book is highly recommended.

MURRAY W. SHULMAN, M.D.

Tea. A Symposium on the Pharmacology and the Physiologic and Psychologic Effects of Tea. The Biological Sciences Foundation, Ltd. 1955, Washington 7, D. C. Pp. 65. ($1.00)

The authors of this booklet present a number of facts about tea which contradict many beliefs concerning its adverse effects in the body. These are derived from numerous experiments on animals and groups of human subjects to whom the different types of tea and tea brewed for different lengths of time, have been administered. The product of the plant *Thea sinensis* is described through all its stages, from the picking of the leaves to its ultimate digestion and subsequent pharmacologic actions. There is also mention of its historical and mythologic background. The pharmacologic action of tea is discussed as an entity as compared with the separate action of its constituents in both healthy subjects and those suffering from certain disease complexes such as heart disease and gastro-intestinal pathology. Its value in the diet of overweight individuals is reviewed, as to its merit from a sociologic point of view. One of the overall actions of correctly brewed tea is that of a mild cortical stimulant in contrast to another beverage which is frequently imbibed in a social setting and which is a cortical depressant.

Tea must be considered as a whole and not for the pharmacologic action of any one or all of its constituents separately, for some of these constituents in the proportion in which they occur in tea appear to have a beneficial synergistic action. This symposium gives the reader a wealth of useful data concerning tea, collected and arranged in such a way as makes its reading wholly enjoyable.

ELIZABETH WEINBERG, M.D.

Surgery of the Alimentary Tract—Bickham-Callender. By Richard T. Shackelford, M.D. In 3 volumes aggregating 2575 pages. Saunders, Philadelphia, 1955. ($60.00)

This three volume compendium includes nearly every operative procedure currently in use in gastro-intestinal and allied organ surgery with informative comments derived from the literature and the personal experience of the author. Each chapter is enriched by a representative list of refrences of the current literature on the subject.

Each segment of the alimentary tract is thoroughly, clearly and systematically reviewed from the standpoint of anatomy, physiology, symptomatology, diagnosis and treatment. All technical procedures are clearly defined and profusely illustrated, with emphasis on the more acceptable or choice procedures. The publishers merit an accolade for their choice of paper and print which is easy on the eyes.

The excellent illustrations on almost every page of the three volumes indicate that the author and publishers spared no expense in borrowing from the best known classics of our time. Grateful acknowledgment is made to *Gross's Surgery of Infancy and Childhood* and Sweet's *Thoracic Surgery*, to mention but two.

Readers will undoubtedly differ with the author on many of his recommendations or choices. However, Shackelford is to be commended for giving the average surgeon the benefit of his extensive personal experience. As an example, I was surprised to read that water may be given by mouth during Wangensteen suction of the stomach. It is my impression that such treatment would further upset the delicate electrolyte balance by additional withdrawal of chlorides from the blood through the difference in osmotic pressure.

Attention should also be called to a typographic error on page 568, Volume I: "In the gastrohepatic omentum the common bile duct is to the right, the *hepatic duct* to the left and the portal vein is posterior and between the other two." The author must mean the hepatic artery not the hepatic duct.

I was particularly impressed by the exhaustive and detailed presentation of the minor procedures which are so often abused and misused because they are considered "minor." This was particularly true in the chapter on ano-rectal pathology.

This is a veritable encyclopedia of alimentary surgery. It should be a valuable asset in every medical library and in the personal library of any general surgeon who takes pride in having the best of surgical literature.

ARTHUR J. D'ALESSANDRO, M.D.

TUBERCULOSIS *Abstracts*

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

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Sarcoidosis

By Harold L. Israel, M.D., and Maurice Somes, M.D., NTA Bulletin, April, 1955.

Sarcoidosis, although not simply defined or described, resembles tuberculosis more than any other familiar disorder. However, there are important differences which distinguish the two diseases.

The epithelioid cell collections characterizing sarcoidosis take the form of tubercles or granulomas which may infiltrate the lymph nodes, lungs, skin, eyes, bones, liver, spleen, salivary glands, and occasionally the heart, kidneys and nervous system. Sarcoid tissue does not produce toxemia as do most infections and neoplasms; the replacement of normal tissue by myriads of sarcoid tubercles mechanically impairs the function of the involved organ.

Although Boeck first described the sarcoid lesion in 1887, it was many years before the disease was recognized as a systemic one which might involve any organ of the body. The earliest report of pulmonary sarcoidosis in the *American Review of Tuberculosis* appeared in 1933, but it was not until 1937 that Pinner's description acquainted most chest physicians with this disease. Since then, many reports on sarcoidosis have appeared. No longer a rarity, sarcoidosis is now one of the diseases most commonly considered in the diagnosis of chronic pulmonary disorders.

It had long been thought that almost all adults were tuberculin reactors. Recognition of the fallacy of this belief, and wider application of the tuberculin test, revealed that many patients with roentgenological and histological findings resembling tuberculosis had negative tuberculin tests. This finding, characteristic of sarcoidosis, led to studies which established a diagnosis of sarcoidosis in many cases.

Widespread x-ray surveys have led to the detection of many patients with diffuse pulmonary infiltrations or much enlarged lymph nodes. Often the chest x-ray appearance is alarming, and on examination one is struck by the patient's relatively healthy condition. Although many times the disability is not proportional to the severity of the roentgenological changes, one must not be misled into thinking that sarcoidosis does not impair health.

Actually, it is uncommon to encounter a patient with this disease who is truly asymptomatic, who has not experienced fatigue and weight loss. Other symptoms depend upon the organs involved; examples are the shortness of breath and cough resulting from extensive pulmonary infiltration, the blurring of vision and even blindness resulting from ocular lesions, and the azotemia which may result from replacement of kidney tissue. Laboratory studies are helpful in directing attention to sarcoidosis. Patients with sarcoidosis as a rule fail to react to second-strength tuberculin, or react weakly. In two thirds of patients an increase in serum globulin concentration occurs.

A diagnosis of sarcoidosis can be made with confidence in the patient with characteristic organ involvement, negative tuberculin test, elevated serum globulin and typical epithelioid tubercles in a specimen obtained by biopsy. Pathological study of a biopsy specimen alone cannot "prove" the diagnosis of sarcoidosis. Other diseases, notably tuberculosis, beryllium granuloma-

tosis, and histoplasmosis may reveal a similar histological appearance. In some instances exhaustive study to exclude these diseases is required before the diagnosis of sarcoidosis can be established.

Cutaneous lesions or enlarged lymph nodes suitable for biopsy may not be available. New methods of securing tissue for histological study have been developed; scalenus fat pad and intercostal pulmonary biopsies as well as needle aspiration biopsy of the liver have proven of value in the diagnosis of sarcoidosis. The specificity of the Kveim reaction has not yet been established, and should not be relied upon in clinical practice.

The Scandinavian use of the term "benign lymphogranulomatosis" for this disease and some of the earlier studies have resulted in a falsely sanguine impression concerning the disease. It was considered at one time that, except for the risk of development of tuberculosis, sarcoidosis was almost invariably benign. In recent years tuberculosis has been an infrequent complication, but sarcoidosis has proven a more serious disorder than it originally appeared to be.

Sarcoidosis is fatal in approximately 10 per cent of cases; and many patients experience serious permanent impairment of function as the result of scarring. Approximately half of patients recover spontaneously. Accumulating evidence indicates that in many instances where recovery seems complete, careful roentgenological and physiological studies will reveal considerable residual fibrosis.

A variety of therapeutic agents has been tried in sarcoidosis, but consistent effects have been obtained only with cortisone and ACTH. Their use is recommended only for carefully studied patients with sarcoidosis who have ocular lesions, progressive pulmonary disease, or other disabling symptoms.

The nature of sarcoidosis and its cause have not been determined. It was once widely believed that sarcoidosis was an atypical form of tuberculosis, but few investigators accept this theory at present. Disbelief in a tuberculous etiology of sarcoidosis has been based largely on the rarity with which tubercle bacilli have been demonstrable in sarcoidosis, and pathological characteristics such as differences in frequency of parotid, ocular, cardiac, pleural, and peritoneal involvement in the two diseases. Recent experience indicates that tuberculosis supervenes in sarcoidosis much less often than when there was greater exposure to tuberculous infection.

Certain epidemiological peculiarities of sarcoidosis have been investigated for possible clues to its etiology. A majority of the patients reported in this country have been Negroes. Epidemiological analysis of data from the armed forces, however, indicated that sarcoidosis was more frequent in both white and Negroes born in the southeastern states, particularly in the rural areas. Sarcoidosis is frequent in northern Europe, and infrequent in South America. These remarkable geographic vagaries would appear an important clue in the search for the cause or causes of sarcoidosis. They suggest either an infectious agent prevalent in certain soils or some constitutional or environment influence in childhood which later results in an altered response to irritants or infection.

Although histoplasmosis and beryllium granulomatosis may simulate sarcoidosis, it has been shown that these diseases are not factors concerned in its causation. Attempts to demonstrate other fungi, or viruses, have likewise been unsuccessful. It has been suggested that sarcoidosis be classified among the collagen disorders, diseases which appear to represent hypersensitivity reactions. At present it must be concluded that the cause and nature of sarcoidosis are unknown.

Although a relatively uncommon disorder, sarcoidosis has attracted an extraordinary degree of medical interest, inspired to some extent by the obscurity which surrounds the etiology and nature of the disease. Of more importance, however, is the fact that sarcoidosis is an example of poorly understood granulomatous diseases which are more often encountered, as tuberculosis and other respiratory bacterial infections decline in frequency.

Discovery of the causation of sarcoidosis might well cast light on the nature of these diseases. Possibly due to infection, to chemical irritants, to constitutional abnormalities, or to hypersensitivity, sarcoidosis and the other granulomatous diseases may prove to have a hitherto unrecognized type of genesis.

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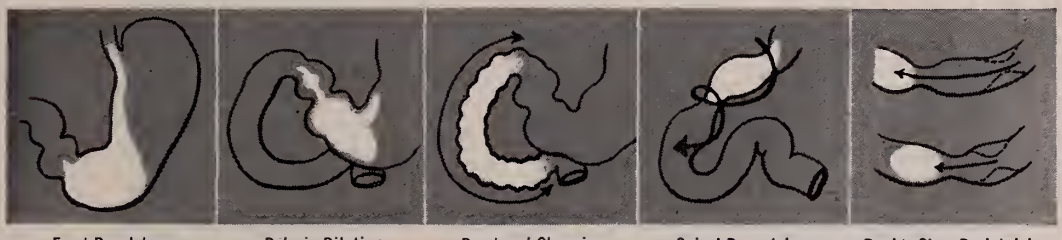

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WORDEL'S, 159 Main Street

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RED BANK

South Jersey Surgical Supply Co., 33 E. Front St.

RIDGEWOOD

Ridgewood Corset Shop, 39 E. Ridgewood Ave.

SOUTH RIVER

Corsetland, 48 Main Street

SUMMIT

Joan Mallon, 109 Summit Avenue
The Fashion Store, 425 Springfield Avenue

TRENTON

Goldberg's, Inc., 123 S. Broad Street
Jones Corset Shop, 232 E. State Street

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A. Holthausen, 3513 Bergenline Avenue

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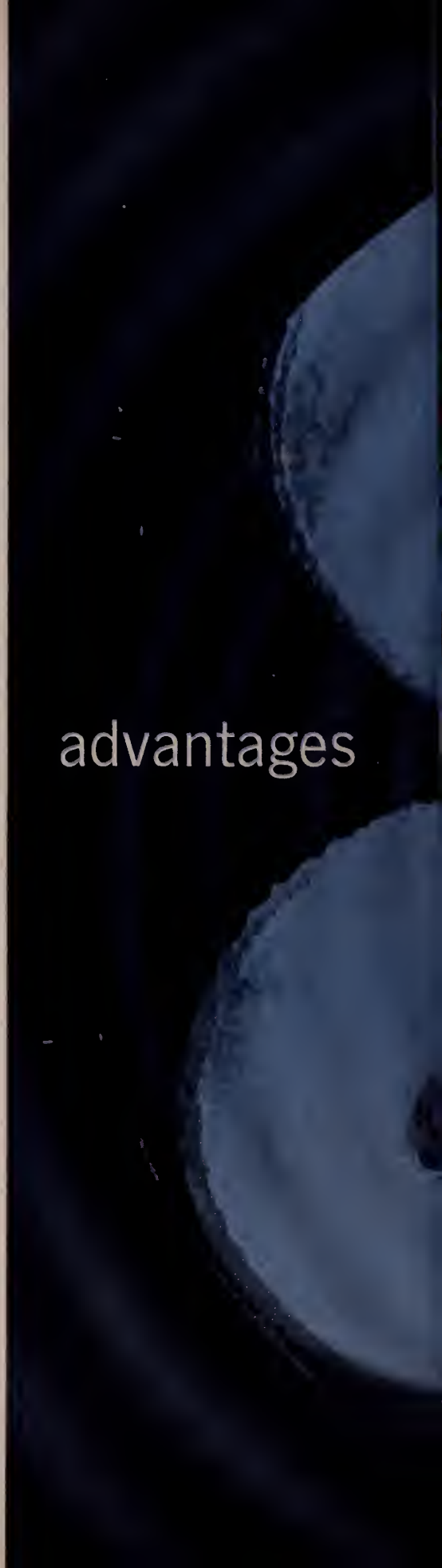

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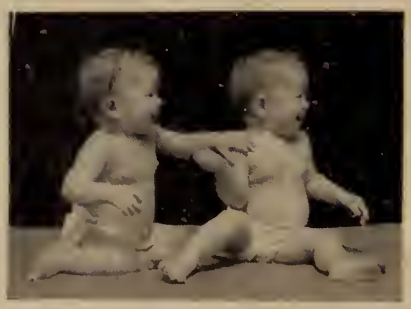

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THE OFFICIAL TRANSACTIONS

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Issued as a Supplement to The Journal of The Medical Society of New Jersey, Sept., 1955

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HOUSE OF DELEGATES

SESSION I

Sunday Afternoon Session — April 17, 1955

The One Hundred Eighty-ninth Annual Meeting of the House of Delegates of The Medical Society of New Jersey convened in the Hotel Ambassador, Atlantic City, New Jersey, on Sunday, April 17, 1955, at 2:25 p.m., Dr. Elton W. Lance, President of the Society, presiding.

PRESIDENT LANCE: The House will be in session.

May we have your attention while Dr. Harvey Bennett gives the invocation.

(Dr. Harvey Bennett then gave the Invocation.)

PRESIDENT LANCE: Members of the House, I will now read to you a statement released to the newspapers about the position of the Trustees on the matter of the Salk poliomyelitis vaccine. Here is the resolution:

"The Board of Trustees of The Medical Society of New Jersey, meeting on April 16 in connection with the Society's 189th Annual Convention now in progress at Atlantic City, adopted a motion which registered gratification at the findings of the recently published report concerning the Salk poliomyelitis vaccine, and which pledged the continued support of the medical profession of New Jersey in the furtherance of the immunization program.

"In a second motion, also unanimously adopted, the Board urged that, through appropriate State agencies, funds be provided 'to assist municipalities to defray the cost of Salk vaccine for distribution to children of indigent and medically indigent families; eligibility to be determined by the appropriate local agency.'

"The Medical Society will look to its member physicians to cooperate in the free administration of the vaccine to persons certified as eligible."

Dr. Hughes will give us a report of the Committee on Credentials.

DR. FRANK J. HUGHES: At two o'clock there were 160 delegates registered. All credentials were in order.

PRESIDENT LANCE: Thank you sir.

Dr. Greifinger, is there a quorum present?

SECRETARY GREIFINGER: There is a quorum present.

PRESIDENT LANCE: At this time I would like to announce the appointment of Dr. Henry A. Davidson as Parliamentarian. Dr. Benjamin F. Lee and Dr. Joseph M. Gannon will serve as Sergeants-at-arms. The personnel of the Reference Committees are published in the printed program.

You have all read the Transactions of the 1954 Annual Meeting of the House of Delegates. They were published as a supplement to the September 1954 JOURNAL and distributed to the membership.

DR. WILLIAM COX (Essex County): I move the approval of the Transactions as published.

DR. JEROME G. KAUFMAN (Essex County): I second that motion.

PRESIDENT LANCE: Any discussion? All those in favor please say 'aye;' all opposed? So ordered.

We come at this time to one of the more pleasant and happier parts of our meeting—that is the privilege of greeting the delegates and members of other organizations and other state societies; some of whom are old friends of ours and others are perhaps newcomers.

I am going to ask Dr. Costello to escort Dr. J. Stanley Kenney, the delegate from the Medical Society of New York. (Applause) Dr. Kenney needs no introduction.

DR. J. STANLEY KENNEY: Dr. Lance, President-elect Butler, Gentlemen of the House: I perhaps can hardly call myself a tradition of The Medical Society of New Jersey, but I certainly am a hardy perennial. It has been my very great privilege to attend about ten of these meetings over the last twelve years or so. I have made some very fine friends, some of whom, I regret, have passed along in the passage of time in the last few years.

I would like to just take this occasion, as one from another State, to tell this House what I, as an individual, and I think I speak for a great many delegates not only from New York but from the AMA, think of the fine type and character of the delegates that you gentlemen send to the American Medical Association. It has been my privilege to know Dr. Weigel, Bill Costello, Wallace Hurff, Dr. Sica, Dr. Crowe over these years, and before them Joe Londrigan and others, and they have done an outstanding job in the AMA. The work has been constructive and they carry the respect of everybody in that House.

And particularly I want to tell you how proud we all feel of the exceptionally fine work that your Trustees do; and I hope that the day will not be too far away when New Jersey will be honored not only with the President of the American Medical Association, in the person of Dr. Allman, but the unique distinction of having had his charming wife President of the Woman's Auxiliary only a few years ago, and I don't think any other state can share that distinction. (Applause)

All state medical societies have their peculiar local problems. This State is no exception, neither is New York. But there are certain problems that are so common that they transcend state lines. A few years ago I was down here when Dr. Murray was your President. I suggested then that it might be a good idea if some kind of a conference between New Jersey, New York and perhaps Pennsylvania could be held periodically to discuss some of these problems that cross state lines. I still think the idea is a good one.

We have common problems in Blue Shie'd. We have ours with the H.I.P. just across the Hudson River. That is not too far away from Hudson County and from Bergen County. It is something that we have to think about. Perhaps a little joint conference from time to time would be a constructive thing to do.

The same thing applies to malpractice insurance and defense, which is one of our most difficult problems. Costs have quadrupled. The competition from insurance companies outside the State — companies not even licensed to write insurance in New York—has bi.l fair to wreck a plan developed over the years. These plans cannot survive after four or five years when they accumulate a loss experience which is known so well to your group and to ourselves. It is inevitable that their premium will have to come up, and come up very high.

I think such problems, just to mention two examples, are common ones that we could very well share.

In closing, I announce to you that The Medical Society of the State of New York will hold its annual meeting in Buffalo the week of May 9. Any of you who are in Buffalo are cordially invited to attend that meeting. I hope at least one of your official delegates will be able to be present. At the session on May 11, the principal speaker will be the Very Reverend Phillip Dobson, SJ, President of Canisius College. I'm sure he is known to many of you in Jersey City because he has been identified for many years with industrial and social relations work. He founded the Institute of Industrial Relations at St. Peter's College in Jersey City. Many other activities during our meeting will interest you, and I hope some of you will plan to be there.

I regret to say that Dr. Dan Mellen, the President of The Medical Society of the State of New York, has not arrived and I am substituting for him to the best of my ability. In his name and in the name of the officers and the trustees of The Medical Society of the State of New York I bring you their cordial greetings and our willingness to help and share in our common problems. (Applause)

PRESIDENT LANCE: We are very happy to welcome Dr. Kenney to our meeting.

We are privileged also to have here, representing the Medical Society of the State of Pennsylvania, Dr. Dudley P. Walker. I would like to ask Dr. McCall to escort Dr. Walker to the platform. (Applause)

DR. DUDLEY P. WALKER: Dr. Lance, Dr. Butler, Dr. Greifinger, Members of the House: It is a great pleasure for me to be here today representing our Society. I hope to attend most of the sessions of your House as long as I can because I am interested in seeing how you do things—whether they are different from ours. If they are, perhaps we can find some valuable suggestions.

I envy Dr. Lance, in that I do not preside at any of the meetings of our Society. We have a Speaker of the House, who is very able and conducts our meetings very successfully.

This is my first official visit as representative of my Society and so this is quite a new role for me. It's a great privilege and a great pleasure. Thank you very much. (Applause)

PRESIDENT LANCE: Thank you, Dr. Walker.

We are privileged this year to enjoy meeting a guest whose presence constitutes, more or less, an unusual event. By coincidence, Mrs. George Turner, President of the Woman's Auxiliary to the American Medical Association, is in Atlantic City. Her visit coincides with our meeting, and to me it is a great privilege to ask her to approach the platform escorted by Dr. David Allman. Will you say a few words to us, Mrs. Turner? (Applause)

MRS. GEORGE TURNER: Dr. Lance, Dr. Butler, Dr. Allman, and Delegates and Guests of The Medical Society of New Jersey: I'm privileged at this time to bring you greetings from the Woman's Auxiliary to the American Medical Association. Our Auxiliary is 33 years old this May. We have 51 constituent auxiliaries with approximately 1500 county auxiliaries, and our membership is about 70,000.

The primary objectives of the Auxiliary are to promote friendliness among doctors and their families, and to assist the medical profession in the advancement of its program of medicine and public health. There are many problems which face the medical profession, other than caring for the sick It is in this field that the Auxiliary can assist by offering sensible evaluations and sound estimates of the medical current events and attitudes of our communities. We can speak to the lay people with whom we make contact in our daily living. The physician's wife speaks the layman's language; yet she is in intimate contact with the profession and in a good position to know its problems and help interpret them to her nonmedical friends.

Our program has a twofold purpose: we try to educate ourselves on the problems of medicine in which we can assist in our county auxiliary meetings; and then we try to be of service to our communities by working on community health projects. We have some committees which closely parallel your committees. For instance, we have a committee for the American Medical Education Foundation which raises money to supplement the budgets of our eighty medical schools. We have a hard working Legislative Committee which keeps itself informed on current medical legislation or other legislation of interest. It is represented at each

county auxiliary meeting. We have a Committee on Mental Health. We cooperate with Civil Defense. We have been active for a number of years in nurse recruitment. In this connection, we have established "Future Nurses' Clubs" in high schools and junior high schools. Our aim is to interest girls in nursing as a career. It is sort of a guidance program. We have lost money on scholarships and loans because of girls who entered nursing and then left without finishing. They wasted a year of the schools' time and some of our money on scholarships and loans.

Our first project was to promote *Today's Health*, which is the lay health magazine published by the American Medical Association. I ask you to assist your Auxiliaries in New Jersey by taking this magazine for your reception room. We aim to place it on the reception room table of every doctor in every state.

We need more members so we will more closely parallel your membership. We want also a county auxiliary for every county medical society, with every eligible doctor's wife a member. Here in New Jersey you have 21 County Medical Societies with 4,981 members. You have 19 Auxiliaries with 1,914 members. There is too big a gap in membership. Go home and encourage your wives to become members of the Auxiliary!

Each year we select a theme. This year the theme of our program has been leadership in community health. This is a fitting objective for women who are married to the medical profession and who are dedicated to community welfare through health education and health service. Our aim is to develop this objective and the program of the Auxiliary to the extent that we will merit the confidence of the people of our communities and the appreciation of the medical societies and associations to which we are auxiliary. Thank you. (Applause)

PRESIDENT LANCE: Thank you, Mrs. Turner.

We are privileged also to have present with us members of the dental profession. Dr. Sharp, will you escort Dr. Giblin here?

Dr. Giblin and I have been running around the state together, eating dinners over the past few months. It is a great pleasure for me to introduce to you Dr. William A. Giblin, President of the New Jersey State Dental Society. (Applause)

DR. WILLIAM A. GIBLIN: It's a pleasure to be here. I notice in looking over this group, I have some of my golfing companions here. I see Dr. Cox from Montclair, who gives me strokes once in a while. If you get strokes from him, you are pretty good.

We have common problems on a lot of things. We feel that with Dr. Lance, Dr. Decker, and Dr. Butler, we are in a position to do things as far as legislation is concerned that we couldn't have done in the past. We realize we have to work together. We know that we have the men to do it now; we have the cooperative committees, and we feel that we are doing a good job. We hope that you, as delegates of your Society, will work with ours and continue to work with us as you have in the past. We appreciate the opportunity of being with you and cooperating with you. I thank you very much for the privilege of just being here as part of your meeting.

PRESIDENT LANCE: Thank you, Dr. Giblin.

Dr. John Carr, stand up here. A lot of you know him. He is the Secretary of the State Dental Society.

DR. JOHN G. CARR: Dr. Lance, Officers, Members of the House of Delegates of The Medical Society of New Jersey: I can't miss the opportunity of expressing to you the appreciation which I have of being invited to your meetings and of the many friendships that I have made in the course of my attendance. I am only sorry that you people choose the same dates that we do and I can't get another three-day vacation this year. Anyway I very much appreciate the friendship which has been evidenced to me by a great many of the members of your Society. Thank you very much. (Applause)

PRESIDENT LANCE: Thank you, Dr. Carr.

Dr. Fritts, would you please escort Miss Rose Coyle? She is President of the New Jersey State Nurses' Association. (Applause)

MISS ROSE COYLE: Dr. Lance, Dr. Butler, and members of our state Medical Society: I deeply appreciate the privilege extended to me today to bring to you the greetings of the New Jersey State Nurses' Association and their best wishes for success in all your meetings.

As an individual, I would like to say that it has been my privilege for many years to work very closely with members of the Medical Society. Those of us who have had that privilege appreciate the bond that has existed between the medical profession and nursing. I sincerely hope that it will continue to do so. Thank you. (Applause)

PRESIDENT LANCE: Thank you very much. And, here is a representative of the New Jersey Hospital Association; Mr. J. Harold Johnston. Would you come up, please? (Applause)

MR. J. HAROLD JOHNSTON: Mr. Chairman, Ladies and Gentlemen: On behalf of the New Jersey Hospital Association, and speaking for our President, we do say thank you very much for the invitation to be here. We thoroughly enjoyed coming. We hope that your convention and your meetings may be

very successful. Thank you very much. (Applause)

PRESIDENT LANCE: Thank you very much, Mr. Johnston.

One of the requirements of our Constitution is that the President shall deliver an address to the Society at its annual meeting. This is the most opportune time, and I beg your indulgence for a few minutes that I may fulfill that requirement. My remarks will be in a sense an extension of my annual report, with some added thoughts for your consideration.

ADDRESS

The Presidency of The Medical Society of New Jersey is a high honor. It is also a demanding responsibility, one which one man cannot carry alone. The assistance and guidance of others are necessary at all times. I should like now to express my gratitude and deep appreciation to the officers and trustees for their support and counsel during this year. My thanks go also to the members of the Society who have so generously and capably served on committees, and who are responsible for the advancement of the various programs of the Society.

I owe, as my predecessors have and my successors will, a debt of deep gratitude to the headquarters staff. Particularly I express my personal indebtedness to Mrs. Madden and to Mr. Nevin who out of their experience have at tongues' tips the answer to many questions which arise and which require a more intimate knowledge of background detail than any officer can dependably carry in his mind. All these acknowledgments are already a matter of record, but they deserve to be repeated.

The conclusion of this convention will mark for me the completion of eighteen years' association with the activities of The Medical Society of New Jersey. Some of these activities are already history, and there is still more history in the making as a result of continuing projects.

What of the future?

I should like to be able to take the time to engage in an exploration of changes which have occurred, not only in the Society and its philosophy but in the relation of the individual physician to medicine, to his patients, and to society generally. Instead may I briefly present to you some things that I believe will require study and action in the future.

The profession of medicine is as old as man. As a consequence of its concurrent development with man, medicine has a character which is as complex as is the personality of man. One of the components of that character is tradition. Tradition is a necessary factor for stability but it can be conducive of stagnation and thus become a detriment to progress.

Individualism is a tradition in medicine. It can be an obstructing and undesirable quality when it degenerates into isolationism. Originally the practicing doctor had to rely, almost completely, on himself. In him individualism, or self-reliance, was a virtue. Today the practicing doctor is part of the vast complex which is modern medicine. He is indebted to many, and dependent as greatly as he is indebted. You cannot be an isolationist today without being out of touch with the reality of professional life. As a matter of fact, you simply cannot be an isolationist and do a proper job.

Medicine must re-examine its traditions and, in some instances, modify them—as in the matter of its vaunted and anachronistic individualism. The doctor is part of a team both as a scientist and as a member of society. In our Air Force, many men are required to keep one pilot flying. So, too, the physician needs the skill and talents of a host of others, to enable him to accomplish his mission.

The future will bring many problems that medicine must face, and the solution of them may require change in other traditional positions, particularly in areas in which these traditions are outmoded.

This is not to say that the fundamental principles by which medicine lives will have to be modified or abandoned. Nor does it mean that medicine must ever become subservient. It means rather that medicine must demonstrate its true competence of leadership by adapting itself to the demands of changing times and conditions. It must guide and direct, or else be doomed to follow.

There are certain programs, already under consideration in our committees, concerning which I think our Society must assume a more progressive attitude. These include: (1) a statewide blood bank organization; (2) an ambitious program to establish hearing and speech centers in selected locations throughout the state; (3) an effective program for the care of the aged and the chronically ill; and (4) civil defense.

These will all require participation of government at some level. This fact should not—in slavish deference to outmoded traditional attitudes—inhibit or embarrass our cooperation.

In addition, we must interest ourselves in medical education, both as to its curricular components and to the practical consideration of deriving partial support through govern-

mental assistance. At this point I suggest to you that consideration be given by this Society to the inclusion in its annual budget of an item providing for an annual donation to the American Medical Education Foundation.

I suggest that this Society must face other changes in its traditional attitudes, notably the inclusion in its *Membership Directory* of a list of qualified specialists, for the benefit of the public and for reference by state and private agencies concerned in the distribution of medical care.

We must also eventually study the question of average fees so that the people may be able to plan more precisely for the financial demands of illness. In this connection I should like to quote briefly from the presidential address of Dr. Edward J. McCormick, delivered before the House of Delegates of the American Medical Association in June, 1954.

> "An additional positive step by the medical profession can be taken that would benefit not only the policyholders but the various underwriters as well. The profession should consider the creation of average fee lists or fee schedules that would prevail on an area or regional basis for the vast majority of cases. If the profession could evolve such a program it would serve two main purposes. The first would establish appropriate values for professional services that would be known to the public. I have felt for years that there has been as much concern over the uncertainty of a fee for professional services as there has been for the actual fee itself. Secondly, insurance underwriters would know what schedules of benefits to offer in various areas, and the degree to which the policyholder might have to supplement the insurance benefit would become more predictable. Furthermore, such a program would avoid a merging of the mechanics of insurance with the art and science of medicine, thereby allowing each to be considered and evaluated on its individual merits.
>
> "Another accomplishment of this proposed program would be to eliminate a large proportion of the complaints of patients with respect to fees. With an average medical fee schedule existing in his community, the patient is enabled to determine with a reasonable degree of accuracy the ultimate cost of the medical service he seeks. This would facilitate discussion between the patient and his physician in the event of a fee variance from the publicized list."

This Society, too, I think, must boldly reconsider its position with reference to the time-honored privilege of self-discipline. A combination of circumstances over a period of years has resulted in poor public relations for medicine. A state of mind has been built up which implies that medicine is on the defensive. Sometimes even we ourselves seem to believe it. It is unfortunately true that occasionally a person holding an M.D. degree gets out of line. But in general I think it fair to say that a good doctor needs no defense, and a bad doctor deserves none.

It is, however, to protect the innocent and to prove that medicine is actively able to discipline itself that I suggest the following:

1. Full and unequivocal support of the Judicial Council and its adjunct county committees, in dealing with complaints and grievances of all kinds, both from the profession and the public.
2. The encouragement of fuller budgetary allotments for the State Board of Medical Examiners to insure adequate means for policing procedures, even if such funds must be supplied by the establishment of an annual registration of all licensed physicians in New Jersey.

More than once during this year the thought has been expressed to me that the Society should lend its energy to the promotion of one big project each year. I believe that you will agree with me that the day-by-day advancement of all our projects is the "big project." You can see that the attainment of our goals requires the sincere interest of every member of this Society and demands his continuing cooperation for as long as may be necessary.

Medicine is a distinguished profession. Notable scientific discoveries are to its credit, such as we have all been privileged to rejoice in these few days past. But the abiding distinction of medicine will not proceed from scientific discoveries alone but will be measured in terms of the unimpeachable worth of the men and women who give it its life and character, and by their constructive contributions to the welfare of society in their time.

I thank you.

RESUMPTION OF BUSINESS SESSION

PRESIDENT LANCE: You all have copies of the Annual and Supplemental Reports. The former were published in the April JOURNAL and reprints are in your hands together with copies of Supplemental Reports. What is your pleasure with respect to these reports?

DR. KAUFMAN: I move you sir, that they be referred to the appropriate reference committees.

DR. SCHAAF: I second that motion.

PRESIDENT LANCE: Any discussion? All in favor say 'aye.' All opposed? The ayes have it. The motion is carried.

If any member of this House would like any discussion on any of the reports before they go to the Reference Committees, now is the time. For example, is there any question on the report of the Chairman of the Finance and Budget Committee? Dr. Allman is here and if anyone has a question about it, I'm sure he will be glad to answer it. Are there any such questions?

(There were no questions)

PRESIDENT LANCE: We now have the pleasure of presenting to you another delegate. Dr. Mulligan has found Dr. Bradley from Connecticut. (Applause)

DR. E. TREMAIN BRADLEY: Dr. Lance, Members of the House of Delegates and members of The Medical Society of New Jersey: It's a pleasure to be here. We enjoyed very much coming down your new Garden State Parkway and seeing spring here, having left winter in Connecticut. Our Medical Society wishes me to bring you its best regards and wishes for a successful and enjoyable meeting. Thank you. (Applause)

PRESIDENT LANCE: At this time I would like to ask if there are any supplemental reports to be offered by any of the committees.

DR. BEDRICK (Hudson County): There is a report here by the Medical-Surgical Plan of New Jersey about the distribution of fees. I see two resolutions by Mercer and another county. The Hudson County Medical Society passed a resolution which I don't see here. Is there any record of that? It's about the distribution of the fees as provided by the Medical-Surgical Plan.

PRESIDENT LANCE: Was there such a resolution received at the office?

MRS. MADDEN: No.

PRESIDENT LANCE: Apparently it has not been received, Doctor.

DR. BEDRICK: We voted it. We voted for the distribution of fees to the assistant as well as the primary surgeon.

PRESIDENT LANCE: If you have such a resolution to present, it can be presented later at this session if it is the desire of your County to do so.

Are there any supplemental reports? If so, they will have to be offered at this time. (No response) This is a very happy situation. Usually we spend the afternoon on supplemental reports.

We have received nine resolutions, copies of which have already been distributed to you. One from Mercer County regarding the Board of Trustees, is a proposed amendment to the Constitution; another from Mercer County about the apportionment of surgical fees; one from Burlington County regarding the apportionment of surgical fees; one from Hudson County concerns compensation of physicians; one from the New Jersey Dermatological Society regarding tinea capitis; one from Bergen County about a schedule of fees in Workmen's Compensation cases; one from the Trustees concerns hospital assessments of staff physicians; one from the Woman's Auxiliary about a Student Loan Fund; another resolution which comes from the Board of Trustees with regard to Dr. David W. Green. I will ask Mr. Nevin to read that resolution.

MR. NEVIN: Here is the resolution:

WHEREAS, The Medical Society of New Jersey is indebted to Dr. David W. Green of Salem County for many years of distinguished service as a member of its Board of Trustees, and

WHEREAS, In 1954 Dr. Green was compelled because of ill health to resign that connection, and

WHEREAS, Dr. Green continues so unwell as to be unable to attend our Annual Meeting this year,

BE IT RESOLVED, That the members of the House of Delegates of The Medical Society of New Jersey in convention assembled salute him for his faithful and valuable services and extend to him greetings and good wishes, and

BE IT FURTHER RESOLVED, That a copy of this resolution be dispatched to Dr. Green as a token of esteem from this House.

DR. KAUFMAN: I move that these nine resolutions be referred to the appropriate committees.

DR. DECKER: I second that motion, but I ask for suspension of the rules to permit immediate consideration of that resolution about Dr. Green.

DR. SCHAAF: I second the motion to suspend the rules for the passage of this resolution.

PRESIDENT LANCE: It has been moved that the rules be suspended in order to consider the resolution regarding Dr. Green. Is there any discussion? All those in favor will say 'aye;' Opposed? Unanimously carried. The rules are suspended.

DR. DECKER: I move that this resolution concerning Dr. Green be adopted by the House without relaying it to a Reference Committee.

DR. BUTLER: I second that motion.

PRESIDENT LANCE: All those in favor will say 'aye;' Those opposed? So ordered. Now eight resolutions, exclusive of the resolution

regarding Dr. Green, will be referred to the proper Reference Committee if you pass Dr. Kaufman's motion.

DR. FRITTS: I second it.

PRESIDENT LANCE: Is there any discussion? All those in favor will say 'aye;' Those opposed? So ordered.

DR. WEIGEL: I have here a resolution presented on behalf of, and with the consent of the State Board of Medical Examiners. It reads as follows:

WHEREAS, The Board of Medical Examiners of New Jersey cannot administer adequately the Medical Practice Act without accurate information as to those physicians duly licensed to practice medicine in this state who are presently so practicing, and

WHEREAS, The Board does not *now* have any satisfactory means of ascertaining the status of many practitioners of medicine,

RESOLVED, That The Medical Society of New Jersey endorse the principle of annual registration of physicians in New Jersey and that the Society take active steps promptly to implement the resolution by developing appropriate legislation to that end.

See page 30.

PRESIDENT LANCE: Thank you, Dr. Weigel. This will be referred to the Reference Committee on Resolutions and Memorials.

DR. CLARKE (New Brunswick): This resolution proposes an annual contribution by The Medical Society of New Jersey to the American Medical Education Foundation for the support of the approved medical schools in this country. The resolution is as follows:

WHEREAS, The American Medical Education Foundation was organized by the American Medical Association in 1951 to provide financial assistance to the nation's medical schools, and

WHEREAS, It is important to the interest of the public and the medical profession that the present high standards of medical education in this nation be maintained, and

WHEREAS, The financial needs of the medical schools can be met by voluntary contributions, if a sufficient number of persons and organizations evidence support, and

WHEREAS, Only 86 physicians, organizations and auxiliaries from the State of New Jersey contributed $3,959.71 to the American Medical Education Foundation during 1954, therefore,

BE IT RESOLVED, That the House of Delegates of The Medical Society of New Jersey endorse the purposes and objectives of the American Medical Education Foundation and

BE IT FURTHER RESOLVED, That the House of Delegates of The Medical Society of New Jersey direct that the sum of $25,000 be paid annually to the American Medical Education Foundation to render financial assistance to the nation's 80 approved medical schools.

See page 21.

PRESIDENT LANCE: Thank you, Dr. Clarke. This goes to Reference Committee "B."

DR. LEONARD ELLENBOGEN (Atlantic City): I propose the following resolution, Mr. Chairman:

WHEREAS, The Hospital Service Plan of New Jersey is making partial payments for x-ray examinations made by hospitals on outpatients, and

WHEREAS, Such payments subsidize unfair competition with physicians who render such diagnostic services in their offices and thus represent an invasion of the private practice of medicine, and

WHEREAS, The Board of Trustees of The Medical Society of New Jersey has clearly stated in January 1948 and again in its report of March 1953 "that the sending of ambulatory private patients to hospitals for x-rays be discouraged where adequate facilities are available in private physicians' offices," and

WHEREAS, Such expenditures by the Hospital Service Plan of New Jersey of necessity decrease funds available for the proper expansion of benefits to hospitalized patients, and their extension to groups not now included in the plan, particularly the aged,

THEREFORE, BE IT RESOLVED, That The Medical Society of New Jersey go on record as opposing these practices by the Hospital Service Plan of New Jersey and that a copy of this resolution be forwarded to the Hospital Service Plan of New Jersey.

See page 32.

PRESIDENT LANCE: Thank you, Dr. Ellenbogen. This will go to the Reference Committee on Resolutions and Memorials.

DR. JOSEPH WEINTROB (Atlantic City): Here, sir, is another proposed resolution:

WHEREAS, (possibly under suggestion of the Joint Commission on Accreditation and in fear of losing the said accreditation) hospitals are requiring routine admission blood counts and serological tests for syphilis to be done by their own laboratories, and

WHEREAS, This occasionally requires blood tests that were done in the home or office in the differential diagnosis of appendicitis to be repeated within hours when the patient is admitted to the hospital, and serology tests to be repeated within days upon the re-admission of patients with chronic or relapsing illnesses, and

WHEREAS, These practices increase the cost to the patient, add unnecessary work to the already overloaded laboratories and subjugate the professional work of a physician to the work of, as often as not, a technician-trainee,

THEREFORE BE IT RESOLVED, That it is

the opinion of this Society that these practices are not in the interest of the patient, sound medical economic practices, or good public relations,

AND BE IT FURTHER RESOLVED, That this State Society hereby instruct its Delegates to the American Medical Association to introduce a memorial requesting a study of these alleged practices with the idea of pressing for their modification through appealing to or instructing the Joint Commission on Accreditation through the proper channel of authority.

See page 31.

PRESIDENT LANCE: Thank you, Doctor Weintrob. This, too, goes to the Reference Committee on Resolutions and Memorials.

DR. SATULSKY: Sir, I have a resolution drafted by the New Jersey Dermatological Society.

WHEREAS, Tinea capitis is a benign and mild disease, not a threat to life or health with a few complications and ultimately self-curative, and is objectionable primarily for cosmetic and hygienic reasons, and

WHEREAS, there is no evidence that contagion is more likely in school than out of school; and it is harmful and unfair to children and parents to exclude these children from school psychologically and from the point of view of their education, since exclusion places a burden on schools, parents and the community as a whole without achieving essential control of this disease, and

WHEREAS, in school, treatment can be best supervised and maintained while the children are receiving an equal education to which they are entitled, and

WHEREAS, a recent survey of the practices of the various states reveals that the majority permit the attendance in school while under proper treatment, and

WHEREAS, the large majority of New Jersey dermatologists have indicated and recommend that children with tinea capitis under treatment and with proper head-covering should be allowed to attend school, and that the disease should be reportable, and

WHEREAS, in view of the above, a modern enlightened and effective control program for tinea capitis would make the disease reportable, and would permit school attendance while the child is under treatment and wearing a proper head covering while under the constant supervision of school authorities,

THEREFORE BE IT RESOLVED, that the House of Delegates of The Medical Society of New Jersey approve these recommendations of the New Jersey Dermatological Society and transmit these recommendations to the proper authority in the New Jersey State Department of Health and the New Jersey State Department of Education.

See page 26.

PRESIDENT LANCE: Thank you, Dr. Satulsky. This goes to Reference Committee "E." Now, I will have the Secretary read, for the record, three other resolutions.

SECRETARY GREIFINGER: This one is from the Board of Trustees and reads as follows:

WHEREAS, it has come to our attention that some hospitals assess staff physicians certain sums of money to be applied to hospital deficits, building campaigns, capital funds, or similar purposes, and

WHEREAS, Some hospitals predetermine the amount to be given by each physician, basing that on such factors as rank, number of patients and other criteria, and

WHEREAS, Such a practice, no matter how designated, is in effect an involuntary tax, and is thus contrary to American principles, therefore

BE IT RESOLVED, That we unequivocally condemn the practice of assessing staff physicians, and

BE IT FURTHER RESOLVED, That we urge each physician voluntarily to contribute to the hospitals of his choice as much as he can donate without hardship, provided that the amount of such contribution is to be determined only by the physician himself; and provided that no hospital impose any penalties, sanctions or restrictions on any physician by reason of the amount of his donation; and

BE IT FURTHER RESOLVED, That a copy of this resolution be sent to: the Secretary of the New Jersey Hospital Association, the President or Chairman of the Board of each hospital in New Jersey, and to the Chief of Staff or Medical Director of each such hospital as well as to its Administrator.

See page 30.

PRESIDENT LANCE: This will be referred to the Reference Committee on Resolutions and Memorials. Now you have resolutions from two county societies.

SECRETARY GREIFINGER: Yes Sir, this one is from the Hudson County Society:

WHEREAS, There is no provision at the present time for compensating physicians for their services in filling out forms for disability insurance for private insurance companies and for the State Disability Insurance; and

WHEREAS, The filling out of these forms has resulted in a tremendous amount of paper work for the doctors and often necessitates the employment of additional office help, thus adding to their office expense; and

WHEREAS, Doctors are frequently subpoenaed to testify before the Commissions in regard to disability claims and have to travel a considerable distance to do so; therefore

BE IT RESOLVED, That The Medical Society of New Jersey take whatever action may be necessary to obtain suitable compensation for

physicians for the performance of the above stated services.

See page 26.

PRESIDENT LANCE: This is referred to Reference Committee "E."

SECRETARY GREIFINGER: This one is from the Bergen County Medical Society:

RESOLVED, That The Medical Society of New Jersey arrange for a conference or conferences with the appropriate representatives of the Casualty Insurance Companies doing business in the State of New Jersey, the New Jersey State Department of Labor, representatives of The Medical Society of New Jersey, and representatives of the County Medical Societies of the State, for the purpose of establishing a schedule of fees to be paid to members of the respective county societies in Workmen's Compensation cases.

See page 27.

PRESIDENT LANCE: This, too, goes to Reference Committee "E."

DR. CARYE-BELLE HENLE: Dr. Lance, I have a resolution concerning x-rays. Here it is:

WHEREAS, X-ray therapy has an important part in the treatment of cancer, and

WHEREAS, In many types of cancer it is the only feasible method of treatment, and

WHEREAS, The economic burden of a catastrophic illness such as cancer is too great for many families, and

WHEREAS, This need has been recognized by the successful inclusion of such benefits in the Medical-Surgical Plans of other states,

THEREFORE, Be it resolved that The Medical Society of New Jersey recommend to the Medical-Surgical Plan of New Jersey the inclusion of x-ray treatments for cancer as an eligible service.

See page 25.

PRESIDENT LANCE: This will be referred to Reference Committee "C."

DR. WILLIAM L. GLASS (East Orange): This is a resolution presented by a member of the Essex County Medical Society, but not previously presented to or acted upon by the Essex County Medical Society for lack of time.

WHEREAS, There exists an extramedical group, namely optometry, engaged in a limited practice of medicine, in the field of ophthalmology, by virtue of an exemption in the medical practice act; and

WHEREAS, Qualified medical opinion on the eye is often necessary in the general medical care of patients; and

WHEREAS, The patient with ocular complaints is rarely in a position to determine whether the services he requires can legally be rendered by other than a physician;

THEREFORE, Be it resolved that the Subcommittee on Medical Practice survey all aspects of the relation between optometry and medicine and that the president at his discretion appoint a special committee, a minority of whose members shall be engaged in the field of ophthalmology, to conduct an investigation of this subject under the Subcommittee on Medical Practice.

See page 26.

PRESIDENT LANCE: This will be referred to Reference Committee "E."

Are there any other resolutions to be presented? (No response)

At this time are there any memorials to be presented from the floor? (No response)

Are there any proposed amendments to the Constitution and By-Laws to be proposed from the floor? (No response)

Is there any new business which has not already been covered? Does anyone have an item of new business to present at this time? (No response)

All of the exhibits will be arranged and ready for inspection tomorrow morning. Please visit these exhibits, particularly the technical ones, because the success of our convention depends to a great extent upon the interest which you show in these exhibits. We'd like to get them back here and therefore I think it would be a very good thing for you, as part of your duty as delegates, to visit the various booths and sign your names. Those who wish to go to the dinner-dance should purchase their tickets early. They can be obtained at the registration desk.

At this time, in accordance with the Constitution, we come to the second reading of the By-Laws and Amendments. " . . . By-Laws may be amended at any annual meeting . . . provided . . . shall have been read twice in open meeting and laid upon the table for one day . . ."

Are there any that require reading at this time?

Copies of these By-Laws, which had one reading, are in your folders.

DR. DILGER: I move that the publication in the folder be construed as a reading.

DR. FRITTS: I second that motion.

PRESIDENT LANCE: Discussion? All in favor say 'aye.' Opposed? The ayes have it, and the motion is carried.

As no new business has been offered, I will declare the House in recess until 12:30 tomorrow. We will now start an hour of discussion devoted to the Medical-Surgical Plan of New Jersey. I will turn the chairmanship of this informal session over to the President of the Board of Trustees of The Medical-Surgical Plan of New Jersey, Dr. Royal A. Schaaf.

(Applause)

MEDICAL-SURGICAL PLAN COLLOQUIUM

DR. ROYAL A. SCHAAF: Dr. Lance, Members of the House of Delegates, Fellows and Guests: It's a great privilege to represent the Board of Trustees of the Medical-Surgical Plan and the Medical Service Administration at what we like to call the open season on the Medical-Surgical Plan. We hope the season won't be too open.

Before getting on with the general discussion, I would like to present the personnel of our staff. Dr. Irving Borscher all of you know. Dr. Nicholas Alfano is the Associate Medical Director. Dr. Nacca is also an Associate Medical Director; and then comes Jim Bryan, our old friend, who is presently having a new assignment as a consultant to the Medical-Surgical Plan rather than Administrator of the plan. Then comes Mr. Smith, who was formerly Assistant Administrator but is now Manager of Office Services.

Now, all of you have seen the annual report as published in the April issue of the JOURNAL, and you have had placed in your hands this afternoon the supplemental report. We would be glad to have questions about any phases of this report as a preview. There are two major problems which we would like to air with this group at this time. We would like to discuss the new subscription contract in some detail, and we would then like to discuss, in as much detail as you like, the question of apportionment of available surgical benefits. I invite your attention to the addenda at the end of the report. These are two resolutions adopted by the American Medical Association last June and the findings and recommendations of the American College of Surgeons in February of this year. Together they have great importance in the consideration of the subject.

I am going to ask Dr. Borsher if he will discuss the substantive changes which are proposed to be made in the new subscription contract and to tell you why, if you ask, they are presented to you in their present form. You will note that we were not able to implement certain instructions that we received from the House of Delegates last year, and the reason for our non-implementation will be developed as we go along. Dr. Borsher. (Applause)

DR. IRVING P. BORSHER: Thank you, Dr. Schaaf.

Two years ago, proposals were submitted to this House of Delegates by the Plan, in connection with the possible issuance of a new subscription contract. The House of Delegates in 1953 approved certain proposals made at that time. What we have now is a situation where the 1949 series subscription contract, the current contract, has been in effect for five full years.

Two of the proposals approved in 1953 by the House of Delegates were quite important. One was to delete coverage for pre-natal care, and the other was to delete eligibility of consultation for Plan payment.

With respect to deletion of consultations as an eligible service, the House of Delegates instructed that, as soon as it is feasible, the Plan provide payment for consultations on some equitable or feasible basis. However, it has come to the attention of the Board that the proposal for the deletion of coverage for pre-natal care and the coverage for consultations —to delete these two services would mean a reduction in benefits under the contract.

The Department of Banking and Insurance in principle will not approve any reduction or elimination of any benefits now provided. Furthermore, in private conferences that have been had with representative employed groups who now have the subscription contract, that same objection was expressed.

In essence, the new subscription contract, the proposals that are submitted to this House of Delegates are the following: To continue pre-natal care as an eligible service; to continue the coverage of consultations as an eligible service; to expand the coverage for medical cases from 21 days per contract year to 21 days per admission, with a 90-day gap of re-hospitalization. Thus, a paid subscriber or dependent will be eligible on each admission for 21 days of medical coverage or medical care; a re-admission within 90 days of discharge will be considered a continuous hospitalization. This is a fair expansion of coverage because in certain instances a subscriber or dependent will have up to 83 medical days of coverage in a contract year instead of 21.

It is proposed to expand the surgical benefits in various ways. First, in the out-patient department in the hospital under the current contract, surgical services to be eligible must be of an emergency nature. Under the new proposal, this eligibility will be expanded to cover all surgery of a "cutting" nature.

Outside of hospital under the current contract, eligibility for surgical services is restricted to emergency surgical services in connection with accidental injury, to a maximum of $25 in any case, and the services rendered within 48 hours of the accident. Under the new contract proposals, we would expand the coverage in accidental cases to $50 in a case and expand the coverage for surgical procedures outside of hospital to include not only tonsillectomy (which is currently eligible outside of hos-

pital) but to include surgical services in connection with the removal of the superficial cysts, tumors, abscesses, foreign bodies, circumcision and puncture of the ear-drum. For newborns, it is proposed to expand the eligibility of coverage from the seventh day of life, under the current contract, to the day of birth.

One other substantive change is with respect to the income limit; not in the amount of the income limit (which is $5,000 under the current contract) but to make it apply to the income at the $5,000 level of *either* the husband or the wife. Under the current contract, the $5,000 income level refers to the income of the subscriber. Special situations that the Plan has encountered over the past five years have arisen in cases where the subscriber is the wife and the husband is classified as a dependent though his income is more than $5,000. Under the classification as a dependent, that has created a "sore-thumb" situation and has precipitated the resignation of some physicians. To obviate that, it is proposed to apply the $5,000 income limit to either husband or wife, so it doesn't matter which one is classified as the subscriber or the dependent. If either one earns $5,000 or more, then the income limitation under the contract does not apply to the participating physician's services.

DR. SCHAAF: Thank you very much, Dr. Borsher.

This proposed new contract is under study by the Department of Banking and Insurance and we expect shortly to have a proposal, first, of the content of the contract and then of the rate.

Of course, if some of these benefits are to be continued and expanded, it would carry a certain increase in rate. This will not be very great in three of the policies: the single person, the husband and wife without maternity, and the one parent and children. The chief increase will be in the family subscription. If all the provisions presently contemplated are included the rate will be $5.20, maybe a penny one way or the other. It will be an increase from $3.84 to about $5.20.

Of course, the benefits are substantial and were we to make no change in our present contract but think of operating under its present provisions, we would still have to have a substantial increase in the premium rate, particularly in relation to the family contract. It is the maternity benefits that really cost us a great deal, and as Dr. Borsher pointed out, there has been very strong objection on the part of the subscribers and the groups to the removal of the provision for prenatal care from the contract. It represents a very marked diminution of benefits and the argument that we strike with the groups is: Well, you had this in being for six years. If it was so bad, why did you keep it going? The answer is, we couldn't change it because of many obstacles.

DR. BORSHER: The Plan in computing rates for the new contract as proposed, includes provision for increase in payment for medical care, surgical care, and anesthesia. On the surgical side it amounts to a restitution of the reductions that were made two and a half years ago in order to cope with the current contract. There will be a restitution. The contract rate has been calculated on the following basis: Surgical procedures in use in 1952 will be restored to a maximum of $25 on each surgical procedure. That means, for instance, that the appendectomies and herniorrhaphies that had been originally at the $150 level and were reduced to $125, would be restored to $150 if the Department of Banking and Insurance concurs with the contract rate proposals. For major surgical procedures involving cancer, heart, lung, brain, spinal cord and stomach, as examples, the maximum payment for that surgical procedure will be increased from $250 to $300.

The increase on the anesthesia is a step forward, we believe, and will make more adequate compensation for anesthesia.

On the medical side there will be provision for increased payment in cases that are acute and require repeated or prolonged visits over a 24 to 48-hour period in any medical case.

DR. NATHAN S. DEUTSCH (Union County): I have been up here before in this same problem. I'm referring to Title 2, Sub-title 3, Surgical Services Outside the Hospital.

About three years ago I made the point that the radiologist was the forgotten man of medicine. I think I ought to pull a little jingle. The little jingle goes this way:

Last night I looked upon the stair;
I saw a man who wasn't there.
He wasn't there again today.
Gee, I wish he'd go away.

We are no longer the forgotten man in medicine. We just aren't there.

Under Sub-title 3, we also have non-surgical benefits to be taken care of in the private physician's office. In emergency procedures involving a possible fracture, the services for x-rays should be paid from the Medical-Surgical Plan. This point appeared to be well taken. It came back from Reference Committee "C" with recommendations that good thought be given on this problem. However, no thought

seems to have been forwarded on this point. We radiologists in New Jersey are dues-paying members of The Medical Society of New Jersey. The State Society, including the House of Delegates, and our baby, the Medical-Surgical Plan, which is a good plan, does not seem to realize that radiologists have a particular problem; that we in the private practice of radiology don't think that we are just to pay dues to this Society. We feel that there is a principle of philosophy of medicine here; that if we go down the drain, other sections of the medical profession will also go down the drain.

DR. SCHAAF: Thank you very much, Doctor. We certainly heard the story before and we have given the answer countless times. Again the answer is: you cannot include under an insurance policy provision for any service unless it is applied uniformly throughout the area which is served. There are four or five different ways in common use in this state for payment to radiologists. One way is salary. Sometimes the radiologist rents the quarters and pays all the expenses, then shares the profits. Other times the radiologist gets a part of the net profit or a percentage of the gross. It is a hodepodge setup. No actuary can possibly compute the cost of x-ray service unless it is applied uniformly. The Banking Commissioner will not permit you to include in your policy provision for something which is not uniformly applied throughout the entire area in every circumstance. Whatever we do has to be done uniformly.

I spent two hours one afternoon with the Radiologic Society answering questions and developing the same point. To this date we have heard nothing. It is not the Medical-Surgical Plan that is so backward in this matter. Last July our office wrote to Dr. Demy, President of the Radiologic Society, and ten months later under date of April 13, delivered to our office on Friday, just before Dr. Borsher came down, was his reply to that letter. And at that time we had asked for suggestions for a possible schedule of benefits and so on. Well, now ten months have elapsed, and you can hardly blame that on the Medical-Surgical Plan when this is the first reply we got to that exploratory approach.

DR. KENNETH L. DAY (Summit): I'm a urologist. In the surgical services in the out-patient department they say that treatment proposed under the new provision will include surgery in the out-patient department for accidental conditions or for operative surgery of a "cutting" nature for non-accidental conditions.

Many times the urologist has to use an endoscopic instrument. Many times he can use electro-cautery or dessication to treat conditions in the bladder or urethra. This is not "cutting" surgery. Yet, it should be included or should be taken into consideration in making the necessary arrangements. The same is true of cystoscopies. It is not a "cutting" procedure, yet it is an "operative" procedure and should be included.

The same thing is true in surgical services outside of the hospital. The Medical-Surgical Plan and the Blue Cross Hospital Plan go hand in hand. Many times, patients are admitted to the hospital for urologic procedures, which could be carried out in the office, primarily because the patient may have hospitalization. They may not have medical-surgical insurance, for example; but if a patient goes in and has a cystoscopic procedure carried out, it may mean that your hospitalization plan pays out $100 or $150 for the period of time that that patient is hospitalized. Many of these things could be taken care of in the urologist's office, and I think that should be considered in making up these new regulations.

DR. SCHAAF: Thank you, Doctor. Instead of referring it strictly to a "cutting" operation, fulguration we would regard as an operative procedure rather than a diagnostic procedure. The phraseology can be changed to include fulguration, considering it as an operative procedure. To define what we have in mind, we have to use that sort of phrase. But we can change it and we intend to.

DR. CARYE-BELLE HENLE (Essex County): There did not appear to be a meeting of the minds as to what Dr. Deutsch was speaking about and what Dr. Schaaf had in mind. Let us separate the hospital practice of radiology, which I believe Dr. Schaaf had in mind when he mentioned many different types of contract, from the private office practice of radiology which I think is pretty uniform and practiced pretty much the same as private medicine anywhere.

DR. BORSHER: It never fails. Every time I go to a national conference, there is discussion of this. Last year some remarks were also made about x-ray fees. That was right here at the open part of the meeting of the House of Delegates. I then made this statement and it will be well to repeat it. Two years ago the House of Delegates of this Society approved a resolution which said, in effect, that the Hospital Service Plan would *not* provide coverage for surgical services; and the Medical-Surgical Plan would *not* provide coverage for hospital services. This approved resolution was voted on both Plans. Both Plans approved of the resolution, and insofar as the

plans were concerned, just added the words "as soon as feasible."

Now, the "feasible" part about it is this: current enrollment in the Hospital Plan is close to two million. Current enrollment in the medical plan is about 1,200,000. Furthermore, the speciality services have not come up with a clear definition themselves as to what is a hospital service and what is a professional medical service, at least with respect to radiology, pathology, electrocardiography and many other aspects of services.

But the important thing is this: once the specialty services do come up with a clear definition that the Plans can apply (because the Plans don't practice medicine) the problem is: How can whatever coverage is currently provided for the 800,000 enrolled difference between the Medical-Surgical Plan and the Hospital Plan—how can any coverage for those 800,000 persons be deleted from the Hospital Plan until such time as the Medical Plan is in a position to take on that coverage? That is the question to be decided.

DR. MORRIS JOSEPH (Passaic County): Last year I had the pleasure of appearing on this platform and Dr. Lance made some remarks about things discussed. That others might not approach the platform with trepidation, I might say that the remarks that I made were referred in the manner that he suggested, but very honorably dealt with by the Judicial Council. This is part of the record of The Medical Society, which is a credit to the Society. I mention that only in passing.

One point Dr. Borsher made which did not conform to some of the things we discussed at a State Welfare Committee meeting about two years ago. We suggested not only the individual income of the husband or wife, but preferably the combined income should be considered. I mentioned a specific instance of a husband and wife who had no dependents, who were earning between them about $9,000 a year, yet the husband appeared as a dependent under the wife's policy. He had a $250 procedure done for about $150. I thought it might be worthwhile considering the combined income certainly in circumstances like that.

Well, the point I wanted to make this afternoon is different. Everybody else came up here with the idea of making inroads on the income of the Medical-Surgical Plan. My suggestion might lead to a reduction in the expenditures of the Medical-Surgical Plan with benefit to the entire medical group and possibly saving waste of funds that are unnecessarily expended at the present time.

Mr. Durgom, who is the Vice-President and Executive Director of the Hospital Service Plan of New Jersey, gave a very fine address to the Citizens Health Council of New Jersey on October 5, 1954. He pointed out that waste and extravagance and the "sky is the limit" idea, were all draining a great deal of funds from the Hospital Service Plan because of admissions which in some cases might very well have been omitted. His final sentence was: "Then the voluntary health movement can go about the business of necessary controls in extending its usefulness within the limits of soundness and not crash into destruction out of 'the sky-is-the-limit' recklessness."

That is pretty much the theme of my discussion now. As Mr. Durgom made the plea for the Hospital Service Plan, I am making the plea for the Medical-Surgical Plan. Particularly I ask you not to take a careless attitude toward admissions, and in that way perhaps you won't kill the goose.

Many patients with minor conditions that once were routinely cared for in the homes and physicians' offices have been encouraged to enter hospitals. This attitude on the part of patients (because of their protection) and doctors (for their convenience, both physical and financial) has drastically affected hospital capacity.

The result has been a shortage of hospital beds. Sometimes this forces costly expansion by these institutions. True, some of this expansion was due to a normal rise in population and to needs that had to be met, due to medical progress. Much overcrowding was and is avoidable. Many beds, even in existing institutions, without expansion, could be utilized for really sick patients, who urgently need institutional care.

A proper and healthy cooperation between physicians and the Blue Cross and Blue Shield can accomplish this. Many patients now occupying hospital beds would be glad to remain at home if they could get the required benefits from these service organizations. Physicians, if properly remunerated for surgery on many minor conditions, done in the home or office, would discourage unnecessary hospital admissions.

Through this united effort of patient, physician and agency the constantly climbing costs of the services would be halted. Premiums might even be reduced, eliminating almost prohibitive outlays for some people in the lower income brackets. Furthermore, federal aid and socialized medicine would be discouraged. Hospital crowding would be greatly reduced and expansion found unnecessary.

This change in policy might prevent bankruptcy on the part of some service organiza-

tions. In the past there have been a number that suffered this fate. The cost of caring for minor cases often times would be in the $25 to $50 range, instead of the $150 to $200 bracket they now occupy. All in all, it would not "kill the goose that lays the golden eggs." (Applause)

Dr. Schaaf: Thank you very much, Dr. Joseph.

Dr. Leonard S. Ellenbogen (Atlantic City): There is no question about what constitutes the practice of medicine. The American Medical Association on numerous occasions and our State Board of Medical Examiners have defined radiology as the practice of medicine. I see no need to cloud the picture by raising anew a question which has been answered so frequently and so authoritatively. Our 1953 House of Delegates, recommended payment for x-rays taken in physicians' offices as part of emergency management done within a 48-hour period. As Dr. Henle so well pointed out, there was no question about who got the fee. The doctor doing and interpreting the x-ray got the fee. But, as I pointed out last year, that, too, is another cloud on the issue. The Medical-Surgical Plan pays the doctor. It's not up to the Medical-Surgical Plan to inquire whether the doctor is part of, for example, a group clinic or what his personal relationships are with the hospital. They pay the doctor. That is crystal clear and I see no reason to raise anew that question. But why has the Plan failed to comply with the recommendation made by this House? Dr. Borsher—and I quote from the record of the State Journal—states that this must await a new contract with appropriate premium rate "if it were decided to include that particular range of coverage."

Yet, I note today that the surgeon's fee has been raised from $25 to $50 for emergency care outside the hospital. I note the inclusion of such benefits as myringotomy, circumcision and lancing. I do *not* note any inclusion of payment for x-ray services by private physicians on an out-patient basis in emergencies.

This has been going on over many years. Numerous fee schedules have been submitted. some on time, although some belatedly—why has nothing been done?

The answer lies in the constitution of the Board of Trustees of the Medical-Surgical Plan. I stated then that they were dominated by surgeons. A contradiction was made to this. So, in the words of Al Smith, let's look at the record.

I have before me a list of the Board of Trustees nominated and elected at last year's meeting. There are twelve physicians, twelve M.D.s listed as members of the Board of Trustees. One of the physicians listed is a paid employee of the Medical-Surgical Plan. Thus, eleven doctors represent all the practicing physicians of New Jersey. Out of these eleven physicians, eight are surgeons. When I say surgeon I include an eye surgeon, a nose and throat surgeon, a urologic surgeon, neurosurgeon or any other surgical specialist.

Gentlemen, I submit that the reason the largest proportion of fees are paid to one of the smallest groups in the State—surgeons—and the reason radiology has been excluded for more than twenty years that the Plan has been in existence is because of the one-sided nature of the Plan.

You have heard the argument against this, namely that the House of Delegates says that there shall be no individual representation of medical groups. I'm for that and I'm not saying that there should be one radiologist, half anesthetist and two-thirds of another specialty represented. What I do say is that the 85 per cent of the physicians of New Jersey who are *not* surgeons deserve a more equitable representation on the Board of Trustees of the Medical-Surgical Plan. Until this is done, regardless of all the arguments and all the fee schedules, I anticipate no improvement. (Applause)

Dr. Schaaf: Somewhat wearily I want to say something I said last year, the year before, the year before that, and the year before that. One reason why we do not pay for emergency x-ray service in the doctor's office is that, without exception, people who are covered by the Medical-Surgical Plan also have Blue Cross. Under the Blue Cross policy, emergency x-ray service is available. Why should our Plan pay additional? Why should the patient who happens to have Blue Cross and not Medical-Surgical go into a doctor's office for x-ray service when he can get it covered?

The argument is not with the Medical-Surgical Plan; the argument is with the set-up of radiology in this state. We didn't make it. We are operating under the pattern of practice established long before we came into being.

So far as, shall I say, exclusive representation by so many surgeons is concerned, that is imaginary. Actually, taking the matter of obstetrics, about sixty per cent of our payments are made to general practitioners. A very high proportion of our surgical fees is paid not to exclusive surgeons, but to very good general practitioners in smaller communities. Most of them who do surgery also do general practice. It is not fair to say that they have exclusive representation on the surgical group.

We have had this experience: from time to

time we have invited representatives of medicine—I mean medicine as distinct from surgery—from different parts of the state. Presently we have two or three very good internists deeply interested in the problems of the Medical-Surgical Plan. But by and large, the medical representation we have had has not been interested; they resign after a while.

I would like to remind you of some of the prominent physicians who were members of this Board and who resigned. All you have to do is look over the old roster of our tenth anniversary and you will see some very fine physicians who didn't continue to put in the time.

This is a very arduous, time-consuming, I might say thankless job, and in defense of the members of the Board other than myself the Society should really be grateful for the time and effort that they devote to this.

Tuesday night twelve members of the Board sat from five o'clock in the afternoon until eleven-thirty at night hashing over three points. What we were going to do about the supplemental report, the apportionment of surgical benefits, and what we were going to say about the new contract. That is only one meeting. I notice at the top of our agenda the other day was the number 197. That meant 197 formal meetings of the Board. None of them were less than a couple of hours and many of them five or six hours. The Executive Committee meetings were something like 400, and that is in a period of ten years. Most of the personnel is the same as the ones who started ten years ago. Now, to think of this Board as serving a special group is all nonsense.

Dr. Borsher: The Trustees of the Medical-Surgical Plan will sincerely approach this question of expansion of coverage for other services as soon as it is feasible to do so. The pressing problem at present is with the review of what has happened in the past five years that the current contract has been in effect; as to what changes are desired by the subscribers for incorporation in the new basic contract, with as reasonable or as low a charge for the subscription contract as can be made in connection with sound operation.

As far as the x-ray situation is concerned, the one difficulty that the Plan has encountered in expansion of services in that direction is to have as clearcut an idea on the actuarial cost as it has for the other services. To this day that situation has not prevailed, but there is hope.

This letter of April 13, 1955 from the Radiological Society, in response to our July 1954 letter requesting information may lead to a solution. Had this response been received three months ago, the solution might be at hand today.

I suggest to Dr. Ellenbogen and the other radiologists that this letter of April 13 would serve very well as a basis for a conference with a liaison committee of the Radiological Society to meet not only with the Medical-Surgical Plan but with the Hospital Plan; and I so recommend.

Dr. R. John Cottone (Mercer County): Mr. President, Members of the Plan of New Jersey: Having reviewed the suggestions as made by you gentlemen, I feel that a great deal of appreciation is manifest on my part, and I know on the part of the members from Mercer, for the time-consuming and wonderful work that you have turned out this year. We see in these changes improvements that we had hoped for in the past and which today are on the eve of realization. I, for one, want to congratulate you on behalf of the Mercer group for the wonderful job you have turned out.

I call attention to Section 9, the "direct payment to subscriber" feature. "In the revised Subscription Contract, it is proposed that when services are rendered by a physician who is eligible to be, but is not, a Participating Physician, Plan payment for such services may be made directly to the subscriber following acceptable proof of the rendition of such services."

The only suggestion I would make here is that the Plan payment instead of being made directly to the subscriber be made directly to the attending physician. I make this proposal because of the great confusion which exists when a payment is made directly to the subscriber. Often the patient is not willing to cooperate and give the necessary information to the Plan so that payment can be made for the services. And I feel that if you gentlemen could change that phrase or omit "payment for such services to be made directly to the subscriber," then a condition which could cause some bad physician-patient relations could be eliminated.

Dr. Schaaf: Thank you very much, Doctor, particularly for the complimentary remarks.

We have arrived at that proposal to pay the subscriber directly when services are rendered by a non-participating physician, for several reasons, the chief of which is this: The participating physician has a contract with the Plan and the Plan has a contract with the subscriber, but it has no contract with anybody else; and if we pay the participating physician, it's a matter of cooperation and courtesy and not of law, and we will continue to do it for that reason.

For the non-participating physician, who

does nothing for the Plan, by not accepting full payment for the people who are entitled to it, we feel that if we pay the subscriber it will have a very salutary effect, for this reason. The non-participating physician will accept frequently what we pay and get an additional amount from the subscriber. Whereas, if the subscriber comes to that doctor with a check for, say, $200 for that particular service, it is very difficult, for the doctor who is so inclined, to pad his bill. It is one of the evils or abuses of Blue Cross and Blue Shield coverage, particularly Blue Shield coverage. We feel that as a Plan we discharge our obligations to the participating doctor by paying him directly, and to the subscriber by paying directly to him when the service is rendered by a non-participating physician. Logic is all on the side of that procedure. We know where the imposition on the Plan comes and why it comes, and we feel that we are offering the subscribers a measure of protection against exploitation.

I was told that this discussion was to be limited to one hour. I don't want to start on the subject of apportionment of benefits now with only a minute or two remaining. I think that you better reserve that for discussion with the Reference Committee tomorrow, unless some one or all of you want to go on and discuss it now. If not, we will adjourn. Thank you.

(The informal meeting was then adjourned at 4:45 p.m.)

HOUSE OF DELEGATES

SESSION II

Monday Afternoon Session — April 18, 1955

The House of Delegates reconvened at 12:40 p.m., President Lance presiding.

PRESIDENT LANCE: The House will be in order. May we at this time have the report of the Reference Committee on Credentials? Dr. Hughes.

DR. FRANK HUGHES: There are 286 Delegates registered, and all credentials are in order.

PRESIDENT LANCE: Thank you.

Dr. Greifinger, is there a quorum present?

SECRETARY GREIFINGER: Mr. President, there is a quorum present.

PRESIDENT LANCE: At this time we will hear the report of the Nominating Committee. Dr. Decker.

DR. HENRY B. DECKER: The last official act of the Junior Fellow is to preside at the Nominating Committee.

I want to thank the House and the members of the Society for the very pleasant time that I have had during the past number of years as a member and an officer. Robert Louis Stevenson once wrote that it is not so much in arriving at one's destination as in journeying pleasantly. I have reached the end, before dark, for which I thank you.

The President, Dr. Lance, automatically becomes Junior Fellow. And of course, Dr. Butler, the President-Elect, automatically becomes President. As for the other candidates, here, sir, are the recommendations of your committee on nominations. For one-year terms ending in May 1956, we nominate:

Dr. Lewis C. Fritts of Somerville as President-elect.

Dr. Albert B. Kump of Bridgeton as First Vice-president.

Dr. Kenneth E. Gardner of Bloomfield as Second Vice-president.

Dr. Marcus H. Greifinger of Newark as Secretary.

Dr. Jesse McCall of Newton as Treasurer.

Dr. William F. Costello of Dover as Delegate to New York.

Dr. D. L. Spurgeon of Newton as Alternate Delegate to New York.

Dr. Blackwell Sawyer of Toms River as Delegate to Connecticut.

Dr. Baxter Timberlake of Atlantic City as Alternate to Connecticut.

These are the one-year terms. For 3-year terms, we nominate:

Dr. C. Byron Blaisdell of Asbury Park as Trustee from the 4th District.

Dr. Carl N. Ware of Shiloh as Trustee from the 5th District.

Dr. Royal A. Schaaf of Newark as the eleventh Trustee.

Dr. Charles H. Calvin of Perth Amboy as Councilor from the 3rd District.

Dr. Joseph Mott of Paterson to the Publication Committee.

These five names are all for terms ending in May 1958. That is, they are all three-year terms. For A.M.A. delegates, regular terms ending in December 1957, we nominate:

Dr. William F. Costello of Dover (delegate)
Dr. Aldrich C. Crowe of Ocean City (delegate)
Dr. Albert B. Kump of Bridgeton (alternate)
Dr. Elton W. Lance of Rahway (alternate).

We are entitled to a sixth A.M.A. Delegate because last December we had more than 5000 A.M.A. members in our Society. That new term ends in December 1956, and we nominate:

Dr. C. B. Blaisdell of Asbury Park as Delegate and Dr. Jesse McCall of Newton as Alternate.

To fill Dr. Phelan's unexpired term as alternate, we nominate

Dr. Elton Lance of Rahway. This term ends this December.

PRESIDENT LANCE: You have heard the report of this committee and thus you have received it. Dr. Lewis C. Fritts of Somerville has been named as President-elect. Are there any nominations from the floor? (pause).

DR. KAUFMAN: I move that nominations be closed and that the Society's ballot be unanimously cast for Dr. Fritts.

This motion was passed unanimously. In like manner, President Lance called for nominations for each other office, and in like manner, no other nominations were made, and nominations were closed by unanimous vote. The candidates proposed by the nominating committee were then declared unanimously elected.

There being no further business, the House recessed until the next day.

HOUSE OF DELEGATES
SESSION III

Tuesday Morning Session—April 19, 1955

The House of Delegates reconvened at 9:55 a.m., President Lance presiding.

PRESIDENT LANCE: The House will be in order.

Dr. Greifinger, is there a quorum present?

SECRETARY GREIFINGER: Mr. President, there is a quorum present.

PRESIDENT LANCE: Report of the Credentials Committee. Dr. Hughes.

DR. HUGHES: Two hundred ninety-three Delegates. All credentials in order.

PRESIDENT LANCE: We will now hear the report of Reference Committee "A." Dr. Charles A. Landshof. Dr. Landshof, I might explain, was appointed to the committee to fill the vacancy left by the unavoidable absence of Dr. Edward Waters. Dr. Landshof—

DR. CHARLES LANDSHOF: Here is our report:

Report of the President—The committee unanimously approved the report of Dr. Lance and commended him for the successful manner in which he has conducted his administration.

Report of the Board of Trustees — Recognizing the tremendous amount of work of the Board and the excellent manner in which it has been carried out, the work of Dr. Blaisdell as chairman was especially commended. The report of the Board was unanimously approved.

Report of the Secretary — The report was unanimously approved. The committee wishes to emphasize that portion of the report which relates to the request for early payment of dues. This would greatly facilitate and simplify the work of the Secretary's Office.

Report of the Judicial Council — The report of the Judicial Council was unanimously approved. The committee commends the Council for its excellent work in the solution of these important problems. The committee hopes that the suggestion of the Council will be followed relative to the caliber of the members appointed to the county judicial committees.

Report of the Executive Officer — The report of the Executive Officer was unanimously approved. This report is indicative of the tremendous volume of work which this organization requires. We recommend that it be carefully studied by the membership that they may better understand the value of the Society to the individual doctor.

CHARLES A. LANDSHOF, M.D., Chairman
JACK E. SHANGOLD, M.D.
GEORGE M. BROOKS, M.D.
H. HALE HOLLINGSWORTH, M.D.
DORSETT L. SPURGEON, M.D.

Dr. Landshof read this report section by section. To each section, a motion was made to approve the report and recommendation and each such motion was carried.

PRESIDENT LANCE: I now call on Dr. Clarke to read the report of Reference Committee "B."

DR. FRANCIS M. CLARKE: Reference Committee "B" met at 10 o'clock yesterday morning with all members of the committee present, as follows: Dr. Harry Taff, Dr. Noah Meyerson, Dr. John J. Laurusonis, Dr. Austin White, and Dr. Francis M. Clarke, Chairman.

Before the committee for consideration were the reports of: the Committee on Publication, the Committee on Medical Defense and Insurance, the Committee on Medical Education, the report of the Treasurer, a resolution submitted from the House of Delegates regarding a contribution by the Society to the American Medical Education Foundation, and the report of the Committee on Finance and Budget.

Report of the Publication Committee — In the discussion of the report of the Publication Committee, it was explained by Dr. Davidson, the editor, that while the publication of THE JOURNAL resulted in a book loss of $3,700, which amounts to a net loss of 81 cents per member of the Society, it was not practical to avoid this loss by an increase in advertising rates. The report of the committee was approved and the Reference Committee feels that the Society is to be congratulated upon having available a Publication Committee of such interest and competence and the able editorial services of Dr. Davidson.

Report of the Committee on Medical Education— The report of the Committee on Medical Education was approved with the suggestion that the committee continue its efforts toward the establishment of a full-time administrative staff without expense to the State Society, for the purpose of promoting and coordinating graduate medical educational activities throughout the state.

Report of the Committee on Medical Defense and Insurance (page 44)—The report of the Committee on Medical Defense and Insurance was presented by the Chairman, Dr. J. Wallace Hurff, in two parts, that which concerned accident and health, and that which concerned professional liability insurance. It was pointed out by Dr. Hurff that these health and accident policies were non-cancellable provided the insurance had been obtained before the age of 65 and the holder of the policy continued in the active practice of medicine, and that the same basic premium rates had been continued over the years with a progressive expansion of benefits.

In the discussion of that portion of the report dealing with medical professional liability insur-

ance, provisions of the contract which most often occasion discussion by the members of the Society were reviewed.

The report of the committee was approved and the Reference Committee takes this opportunity to call to the attention of the members of the Society the fact that this insurance is issued on the basis of individual contracts between the company and the physician with the benefit to both parties of group participation. Rates are not determined by the company but by the National Bureau of Casualty Underwriters with the approval of the State Department of Banking and Insurance, and are based on the general insurance principle of spread of risk through all the specialties and general practice. It was also pointed out that through the years the incidence of suits for malpractice has varied in the various specialties from year to year. The chairman of the committee was asked as to the feasibility of professional liability insurance by the Medical Society itself. This was discouraged because of the experience in other states. During the discussion and explanations by the chairman of the committee, many practical difficulties were explained and the Reference Committee urges patience on the part of the members of the Society in consideration of this very difficult field. Many of the problems of policy and procedure are extremely technical and quite beyond casual administration.

The Society is extremely fortunate to have the services of such an informed and interested committee and chairman.

Report of the Treasurer (page 41)—The report of the Treasurer was reviewed and approved. The Reference Committee commends the Treasurer upon the excellent state of the finances of the Society and the clarity of the report.

Resolution from the House of Delegates — The resolution referred from the House of Delegates regarding a contribution to the American Medical Education Foundation was amended to read as follows:

WHEREAS, The American Medical Education Foundation was organized by the American Medical Association in 1951 to provide financial assistance to the nation's medical schools, and

WHEREAS, It is important to the interest of the public and the medical profession that the present high standards of medical education in this nation be maintained, and

WHEREAS, The financial needs of the medical schools can be met by voluntary contributions, if a sufficient number of persons and organizations evidence support, and

WHEREAS, Only 86 physicians, organizations and auxiliaries from the State of New Jersey contributed $3,959 to the American Medical Education Foundation during 1954, therefore,

BE IT RESOLVED, That the House of Delegates of The Medical Society of New Jersey endorse the purposes and objectives of the American Medical Education Foundation and

BE IT FURTHER RESOLVED, That the House of Delegates of The Medical Society of New Jersey direct that the sum of $25,000 be paid to the American Medical Education Foundation with the recommendation that the matter of this contribution be considered at each annual meeting.

The committee had the pleasure of having present Mr. John W. Hedback of the staff of the American Medical Education Foundation, to answer questions during the discussion. Also present were Dr. Butler, Dr. Greifinger, Dr. Wegryn and Dr. Allman. No opposition to the adoption of the resolution was offered.

Now, Mr. President, this is not the whole report, but since this part seems to be entirely noncontroversial, I'd like to move its approval so far.

DR. FRITTS: I second that.

PRESIDENT LANCE: Any discussion? All in favor say 'aye.' All opposed? Carried. The House has approved the sections of the report of Reference Committee "B" as read. Please continue, Dr. Clarke.

DR. CLARKE: We also reviewed the report of the Committee on Finance and Budget, especially the part dealing with a proposed employees' pension plan. Here is our report:

Report of the Committee on Finance and Budget (page 43)—The report of the Committee on Finance and Budget relating to the employees' pension plan was approved. It was noted that this plan had been derived after extensive study by the committee and a committee appointed by the Board of Trustees, and that the final plan had been approved by the Board of Trustees.

The Reference Committee recommends that the per capita assessment for 1956 be continued at $30, as in 1955, in order to provide the funds necessary for the appropriation to the American Medical Education Foundation.

The Reference Committee recommends that the budget for 1955-56 be adjusted to provide for the appropriation to the American Medical Education Foundation, and that under item C, the per capita assessment for 1956, be $30, as in 1955.

Again the Society is fortunate to have the continued expert financial guidance of Dr. Allman and his committee.

DR. CLARKE: Mr. President, I move the adoption of this portion of the report.

(The motion was seconded.)

PRESIDENT LANCE: Is there a discussion? Dr. Brodkin.

DR. HENRY A. BRODKIN: Mr. President and Members of the House of Delegates: I'd like to discuss the employees' pension plan. This is in the Report of the Committee on Finance and Budget which you just heard. I want to apologize for my ignorance of pension plans, but I do know of the existence of two types: first, in large profit-making businesses where employees are given pensions after thirty years

of service; second, non-profit institutions like cities and states where employees contribute a portion and the institution contributes a part.

Now, I am representing some of the doctors in this State, who are individuals, who through their efforts and work make their own pension plans and systems. A good proportion of them do work for cities, states and municipalities, but in every instance they do contribute part of it.

Now, how can I in clear conscience vote for a pension plan, the cost of which will be entirely borne by this Society, which in turn is borne by every physician in the state? In all fairness, as long as we are not a profit-making organization, I'm all for a fair wage, but I think that this employees' pension plan should be partly contributed to by the employees and part by the association. And I'd like to make an amendment, if I may, in that regard. So if it is in order, I'd like to make a motion.

THE PARLIAMENTARIAN: The only thing you can do is to recommend that the plan be rejected. You can't develop a brand new pension plan by a motion to amend.

DR. BRODKIN: I'd like to make a motion, then that this present scheme be disapproved and a new scheme considered which would be, in my opinion, more equitable.

DR. DEWITT H. SMITH (Princeton): I'd like to say something else about this plan which struck me forcefully. I call your attention to Item "i" in the report on the plan, which says: "Future clerical and stenographic staff members to be under age 30 when employed."

Now, there has been a great deal of effort expended by a great many people and a great many organizations to see to it that older individuals are not cut off from employment. What is the good of our efforts as doctors to see that people live longer if we don't also see to it that every effort is made to make them employable? And I don't see how The Medical Society of New Jersey in conscience can say it won't employ anybody over thirty and then urge other organizations to do what they won't do themselves. It seems to me this is not in the best interests of the employment of the population as a whole. I think we are forced to adopt this pension plan because no other is on the horizon, but I think it should be restudied and changed in the future.

DR. DAVID B. ALLMAN: Mr. President, Members of the House of Delegates: First, it is unfortunate that the gentlemen who spoke previously were so tied up yesterday that they couldn't come to the Reference Committee "B" to discuss it there and learn all the pros and cons of the situation which we were prepared and would be happy to tell them.

The talk of more consideration just falls on deaf ears as far as I'm concerned. We have hashed this thing over for two years now. We have talked it over pro and con; we have had many experts in with us. I, for one, spent all the time I'm going to spend on it. We have spent countless hours—the officers, the trustees, the experts and employees and everybody concerned.

Now, for my part, you either adopt it today or forget it. Don't let's keep the employees quibbling around here for two or three more years. They are either entitled to a pension plan or they are not entitled to it.

This is the one that the officers felt was best. This is the one that the insurance experts feel is the best. The employees didn't want a contributing plan. If it was contributing, it would be raised only by the amount of their contributions, so whether they contribute or not, they get less this way than if they did contribute.

I'm not speaking for the plan or against the plan. If you don't like it, turn it down. If you do like it, pass it; but don't equivocate. Let's either kick it out the window or pass it.

PRESIDENT LANCE: Dr. Allman, I'd like to ask you to speak to the point of employees under thirty. Perhaps there might be a misunderstanding as to the age at which they can continue employment.

DR. ALLMAN: The reason for the age limit is that we have an employee or two around there now—the caretaker, I think, who is about 62, who in a year or two would come under the pension plan if we didn't have that provision in there.

Now, future service for new employees is to be computed on one per cent of the monthly salary for each year of service after three years of continuous service and after attaining the age of 25.

Is that what you meant, Mr. President? Or what point did you want cleared up?

PRESIDENT LANCE: I think there might have been a misapprehension that we were not going to be able to employ people over the age of 30. There was no restriction on the age at which people can be employed by us.

DR. ALLMAN: No, there is no real restriction.

DR. VINCENT P. BUTLER: Dr. Allman, will you not clear up one thing for Dr. Brodkin? And I, like him, feel, too, that there should be some contributory phase to any pension plan, but in this particular case with our employees our contribution is in lieu of a bonus which they have been getting each year, and

that is in effect their contribution which amounts to what would ordinarily be a proportion of their salary that would be in other cases a contribution to the plan. Am I not correct in that, Dr. Allman?

DR. ALLMAN: You are correct, and it is a very important point. And there is so much about this pension plan. As I say, this isn't something that one can decide in five minutes. We have spent hundreds of hours on it.

For many years we have been paying these employees a bonus each year and that bonus will now be discontinued and that is in lieu of a contribution on their part. No new employees are to be eligible for participation in the pension plan if over 45 years of age, unless that employee is under 50 years of age and personally pays back the premiums to the age of 45, so we won't be littering up the pension plan with a lot of elderly employees. Paragraph "i" reads that "Future clerical and stenographic staff members to be under age 30 when employed." Clerical workers don't often come to us after 30 years of age, at our salaries. If they reach 30 years of age, they've got a better job.

DR. BRODKIN: I move that the proposed pension plan be "not approved." I don't mean "disapproved." I mean "not approved at this meeting."

(There was no second.)

DR. SCHAAF: Mr. Chairman, we have not disposed of Dr. Clarke's motion to approve. I presume Dr. Brodkin means to amend Dr. Clarke's motion to approve by changing the word "approve" to "disapprove."

DR. BRODKIN: That's right.

PARLIAMENTARIAN: An amendment which stultifies a motion is not a legitimate amendment. You cannot amend by changing "approve" to "disapprove." If Dr. Brodkin disapproves, he should vote against the motion, and urge others to do so. But he cannot convert Dr. Clarke's motion into his own by changing the word "approve" to the word "disapprove." The only item before the House now is Dr. Clarke's motion to approve this part of his report.

DR. BRODKIN: Point of order, please. In voting on Dr. Clarke's motion, we are voting on the entire section of the Report of the Committee on Finance and Budget. My motion was purely in regard to the first portion which you declared out of order, which I accept. Now, may I suggest that you just propose that portion of the committee report just dealing with the pension plan and then go on from there?

PRESIDENT LANCE: Will you move the adoption of the first paragraph of your report then?

DR. CLARKE: Mr. President, I move the adoption of this portion of the report dealing with the employees' pension plan.

(The motion was seconded.)

PRESIDENT LANCE: That involves the first paragraph of the report. Is there any discussion? All those in favor of the motion will please say 'aye;' those opposed?

I will ask for a rising vote for 'aye.' Thank you. All those opposed will please rise. The 'ayes' have it.

DR. CLARKE: Mr. President, this entire report has been approved by all members of the Committee without dissent, and I move the adoption of the report as a whole.

DR. HURFF: Before this report as a whole is adopted, it has just come to my attention that the Committee on Insurance made recommendations relative to the continuation of Faulhaber & Heard and E. & W. Blanksteen as our official brokers in their respective fields. Am I right that you did not include that in your report?

DR. CLARKE: Mr. President, that is an inadvertence. We were concerned more in our thoughts with the content of the report rather than the matters which Dr. Hurff mentioned; and if it is in order, I would like to amend the report to recommend that Blanksteen and Faulhaber & Heard be retained as brokers for this insurance policy.

PRESIDENT LANCE: Gentlemen, we will return to a consideration of the Report of the Committee on Medical Defense and Insurance. Dr. Clarke has made an amendment and has moved the amendment. Do I hear that motion seconded?

(The motion was seconded.)

PRESIDENT LANCE: Is there any discussion? All those in favor of the amendment will please say 'aye;' Those opposed?

All those in favor of the approval of that section of the report will please say 'aye;' all those opposed? It is so ordered.

DR. CLARKE: Mr. President, I move the adoption of the report as a whole.

(The motion was seconded.)

PRESIDENT LANCE: All those in favor will please say 'aye;' those opposed? It is so ordered.

I thank you very much, Dr. Clarke, and your Committee for your long hours of work on this. We appreciate it very much.

Next we will ask for the report of Reference Committee "C." Dr. Moriconi.

DR. MORICONI: Here is the report of Reference Committee "C." Dr. Diskan, Dr. Golden, Dr. Brindle and Dr. Carrigan were able and assiduous in carrying out this assignment and

I want to place my thanks on record. Now here is the report:

1. *Medical Service Administration*: The Annual Report of the Medical Service Administration was carefully studied. The Committee recommends its acceptance. We feel that the nominations for the Board of Governors of the Medical Service Administration are excellent and recommend concurrence. (See page 48)

2. *Medical-Surgical Plan*: The Annual and Supplemental reports of the Medical-Surgical Plan were examined and discussed at great length. (See page 46)

The majority of the Committee voted for acceptance but unanimously recommends the following changes:

a. Page 3 of supplemental report "The Board of Trustees is of the opinion that it is in the interest of the Plan to keep the payment for surgical assistance within a range of not less than $10 not more than $50, depending upon the surgical procedure," *change to read* "The Board of Trustees is of the opinion that it is in the interest of the Plan to keep the payment for surgical assistance within a range of not less than $10 not more than $30, depending upon the particular surgical procedure."

DR. MORICONI: I move the adoption of this portion of the report.

DR. FRITTS: I second that motion.

PRESIDENT LANCE: Any discussion? All in favor of approving of this part of the report say 'aye.' All opposed? Carried. Continue, Dr. Moriconi.

DR. MORICONI: "Page 7, Paragraph (9) of the supplemental report 'Direct Payment to Subscriber,' first paragraph. It was the feeling of the Committee that adoption of this procedure would harm the Plan and promote friction and poor public relations. It unanimously voted against including this in any projected new contract and recommends that it be deleted."

I move the adoption of this portion of the report.

(The motion was seconded.)

DR. SCHAAF: Mr. President, Members of the House of Delegates: I would first like to express appreciation to Reference Committee "C" and particularly Dr. Moriconi for the judicial manner in which he conducted the meeting and in the impartiality which he displayed toward various opinions which were expressed. It was a most difficult assignment and it is always controversial. Dr. Moriconi discharged his obligations with great credit to himself.

There are one or two things that I would like to say. I don't mind being quoted, but when I'm quoted I like to be quoted accurately. I am being quoted as having said that all non-participating physicians are chiselers. That is not what I said. I said that all cancers are tumors, but I didn't say that all tumors are cancers. When exploitation of subscribers occurs, it is invariably from the non-participating physicians. I am happy to say the number of such chiselers is minimal, but when they occur it is very bad for public relations.

Now, I would like to rise to a point of order and ask the Chair to rule on this particular question. In the 1953 session of the House of Delegates the Board of the Medical-Surgical Plan was directed to include the present question under discussion in any new contract. I submit that the recommendation to delete at this time would constitute a rescission of an action by a previous House of Delegates.

To rescind should have had a motion introduced in the first House of Delegates, or today, by suspension of rules and unanimous consent; and I therefore ask for a ruling from the Chair as to whether or not this particular recommendation at this time is in order.

PRESIDENT LANCE: The Chair rules that this paragraph is out of order.

DR. MORICONI: "(2) The Committee recommends concurrence with the nominations for the Board of Trustees of the Medical-Surgical Plan." (See page 48)

I move the adoption of this portion of the report.

(The motion was seconded.)

PRESIDENT LANCE: Any discussion? All those in favor say 'aye;' opposed? So ordered.

DR. MORICONI: "(3) Referrals from the Board of Trustees of The Medical Society of New Jersey: a. 'Apportionment of Available Surgical Fees.' The Committee by majority vote accepted in principle the resolution adopted by the House of Delegates of the American Medical Association on 'Apportionment of Available Surgical Fees' and recommends its adoption."

The minority view is now placed before you. It is as follows: "That the Board of Trustees of the Medical-Surgical Plan of New Jersey continue the present method of payment for surgical procedures with no apportionment of the surgical fee."

Mr. Chairman, I move the adoption of the majority report.

(The motion was seconded.)

DR. R. JOHN COTTONE (Trenton): Mr. Chairman, I move to substitute the minority views for the majority report.

PRESIDENT LANCE: The motion is to substitute the minority views for the report of the Committee. Do I hear that motion seconded?

(The motion was seconded.)

PRESIDENT LANCE: Motion has been made and seconded that the minority views be substituted for Section "a" of Paragraph 3 of this portion of the report. Dr. Cottone has moved an amendment to the motion for approval of Section "a" of Paragraph 3, which substitutes the minority views for Section "a" of Paragraph 3. Is there a discussion? All those in favor of the amendment will say 'aye;' all those opposed? (There were several Noes.)

All those in favor of the amendment will please rise.

(A number of Delegates arose.)

DR. BRODKIN: Mr. President, can we have some explanation of this thing? I don't know that this is very clear.

PRESIDENT LANCE: I called for discussion, Doctor.

DR. BRODKIN: I can't discuss it. It's not clear to me.

PRESIDENT LANCE: We are not trying to railroad anything, but I did call for discussion.

All those opposed will please rise. Thank you. The amendment is lost.

Is there a discussion on the motion to approve the portion of the report designated by Section "a" of Paragraph 3?

Dr. Brodkin, if you want discussion, this is your opportunity. Do you want to discuss this portion of the report now?

DR. BRODKIN: I don't understand it. Honestly I would vote for it because most of my delegation voted for it.

PRESIDENT LANCE: You have heard the motion for the approval of Section "a" Paragraph 3. All those in favor please say 'aye;' those opposed? (There were several Noes.)

All those in favor will please rise. Thank you. Now those opposed please rise. Thank you. Section "a" of Paragraph 3 is approved; so ordered.

DR. MORICONI: "b. 'Criteria for Specialists.' The supplemental report of the Medical-Surgical Plan on Page 6, Paragraph (7) 'Consultation Services,' proposes to continue consultations as an eligible service. The Committee unanimously recommends this action as against previous decisions of the House of Delegates and the Board of Trustees of the Medical-Surgical Plan. Under the provisions of the present contract, eligible physicians cannot be classified as specialists or otherwise for purposes of consultations."

I move the adoption of this portion of the report.

PRESIDENT LANCE: Is this paragraph in approval of a report which has been submitted? Or is the Committee suggesting a change in the report?

DR. MORICONI: No change is being suggested. We had an annual report here and then we had a supplemental report. In the annual report there was a considerable discussion about doing away with the consultation service which had been approved in principle by the House of Delegates last year. In the supplemental report they brought the consultation service back into the Plan again under a contract basis that is in the future. In other words, we are approving the idea in principle. We disagree with the idea of taking away the consultation services.

I move the adoption of this portion of the report.

(The motion was seconded.)

PRESIDENT LANCE: Is there any discussion? All in favor will please say 'aye;' those opposed? It is so ordered.

DR. MORICONI: And finally, Mr. Chairman, here is the rest of my reference committee's report:

(c1.) The Committee concurs with the Board of Trustees of the Medical-Surgical Plan, that, under present rates, (a) "Payment of appropriate fees for physicians assisting at either surgical or obstetrical procedure in hospitals," and (b) "Payment for emergency medical or other emergency office procedures as it allows for office emergency surgical procedures" might become an uninsurable risk. The supplemental report increases the maximum eligible Plan payments for emergency surgery for accidental conditions outside of hospital to $50 from $25, and increases the limit of eligible days of medical (non-surgical) services for a Contract Year from 21 days of such care in hospital per Contract Year (as in the 1949 Series Contract) to 21 days of such care per hospital admission, provided that any subsequent hospital admission occurring within 90 days of previous discharge shall be considered continuous hospitalization.

(c2.) Concerning "Point of Re-affirmation from Committee on Group Practice." The proposed new subscription contract on pages 4 and 5 of the supplemental report of the Medical-Surgical Plan makes many changes which the Committee recommends for adoption.

(c3.) "Recommendation from Committee on Welfare Services—With reference to making blind persons eligible for benefits of the Hospital and Medical-Surgical Plans." The Committee concurs with the view of the Board of Trustees of the Medical-Surgical Plan which deems this impractical for the present and recommends the acceptance of this latter view.

(c4.) The majority of the Committee disapproved of the resolutions of the Burlington and Mercer County Medical Societies (See page 48) and recommends apportionment as reported in the supplemental report of the Medical-Surgical Plan.

(c5.) After careful examination of the resolution presented by the Essex County delegation the Committee recommends the adoption of the resolution with the following changes: to "inclusion of x-ray treatment for cancer as an eligible service,'

add "as in-patient, ambulatory out-patient or non-hospital patients, if actuarially feasible." (See page 11)

Albert F. Moriconi, M.D., Chairman
Samuel M. Diskan, M.D.
William M. Golden, M.D.
Harry R. Brindle, M.D.
Francis P. Carrigan, M.D.

Dr. Cottone: I ask the indulgence of the House of Delegates to permit me to discuss a section of Reference Committee "C" which has already been approved in part.

President Lance: Will you designate the section, please?

Dr. Cottone: The section has to do with proration of surgical fees.

President Lance: To do that would require unanimous consent. Is there any objection to reopening discussion on this matter?

(Several calls of "yes" from various parts of the floor.)

President Lance: Since we could not get unanimous consent, I cannot permit you to reopen that discussion. Now we have before us a motion to approve the amended report of Reference Committee "C." Has it been seconded?

(Motion was seconded. There was no discussion. It was carried.)

Dr. Schaaf: On behalf of the Trustees of the Medical-Surgical Plan, I offer this House their thanks for the impartiality and consideration which was shown to the Board by Reference Committee "C." I move you, Mr. Chairman, that this House express its thanks to Reference Committee "C" for a judicious, impartial, hard-working and carefully considered operation.

(The motion was seconded and carried.)

President Lance: Dr. Moriconi, you, your committee and all those who participated in the labors of your committee really merit our thanks. I shall present to the Board of Trustees at their next meeting a proposal that a medal be struck for whoever is asked to serve as chairman of that committee in the future. (Laughter)

Reference Committee "D." Dr. Konzelmann.

Dr. H. J. Konzelmann: Reference Committee "D" met at 10 a.m. yesterday with the following members present: Drs. R. W. Betts, John L. Olpp, and Henry J. Konzelmann. Dr. Francis P. Carrigan was excused to go to another Reference Committee meeting. We considered reports of the following committees: Emergency Medical Service, Civil Defense; Medical School; Physicians Placement Service; and Medical Research.

Emergency Medical Service, Civil Defense report was unanimously approved, and your Reference Committee recommends its adoption.

Medical School report was unanimously approved and your committee wishes to commend the Medical School Committee for the amount of work done on this project in spite of its failure. Adoption of this report is recommended.

Physicians Placement Service report was unanimously approved, and its adoption is recommended. Your Reference Committee recommends that nearby medical schools and hospitals be notified of the existence of the placement service, and the medical profession as a whole be apprised through the *Journal* of The American Medical Association.

Medical Research report was unanimously approved and its adoption is recommended. Your Reference Committee strongly deplores the difficulties arising in bringing the drinking driver to justice and recommends to The Medical Society of New Jersey that this stand be publicized and the serious cooperation of the legal profession be sought in solving this problem.

Henry J. Konzelmann, M.D., Chairman
R. Winfield Betts, M.D.
John L. Olpp, M.D.

Dr. Konzelmann read the above Report of Reference Committee "D," which was adopted, section by section and as a whole, by appropriate motions.

President Lance: The thanks of the President and officers of the Society go to the Chairman and members of this Committee.

I'll call for the report of Reference Committee "E." Dr. Winton H. Johnson.

Dr. Winton H. Johnson: Mr. President, I wish to thank the members of Reference Committee "E" and all the doctors who participated in the lively discussion we had there.

Reference Committee "E" met yesterday with all members present.

The reports of the Welfare Committee, Special Committees of the Welfare Committee, Subcommittees of the Welfare Committee, Special Committees of the Subcommittee on Medical Practice, Special Committees of the Subcommittee on Public Health, referral from the Board of Trustees re Workmen's Compensation Fees, and Resolutions were all approved with the exception of:

1. *Public Relations Committee* report dealing with the 'Professional Estimate Forms.' This portion was referred back for further study and it is recommended that no action be taken at this time."

With your indulgence, I might read this little paragraph that caused the difficulty:

"The Subcommittee recommended that a 'professional estimate form' be developed. The Board of Trustees has filed this suggestion. Your Subcommittee believes that the possible 'professional estimate form' be given publicity in the Journal or in the Membership News Letter."

After questioning the members of the Committee, it was felt that this was some sort of a financial estimate that the doctor and the patient may go over in those cases where both would like to

do it in arriving at a just and equitable fee for their problems. This came after our action on this thing and it does warrant some merit, being on a voluntary basis, but we felt it ought to be given more study and recommendation.

I make a motion that we adopt this section of the report.

(The motion was seconded.)

PRESIDENT LANCE: Is there a discussion? All those in favor say 'aye;' those opposed? So ordered.

DR. JOHNSON: "2. Report of the *Committee on Chronically Ill* was approved in principle, but it is recommended that the Committee avail themselves of a great deal of information on this problem that is available at the State Department of Institutions and Agencies about the Hill-Burton Act. It is further recommended that the proposed county committees work with State government agencies in implementing it."

This was a report of the Chronically Ill Committee that had to do with the establishment of committees to work out the problems of chronically ill and the need for it in their counties or communities. We feel that that is a good idea, but that a lot of this work has already been done by and with these agencies and that that be worked along that line.

Mr. President, I move the adoption of this portion of the report.

(The motion was seconded.)

PRESIDENT LANCE: Is there a discussion? All those in favor please say 'aye;' opposed? It is so ordered.

DR. JOHNSON: The one that caused most discussion was this referral from the Board of Trustees concerning the Workmen's Compensation fees, and that was a lively one.

"A lively discussion ensued by all members of the Committee and the many interested doctors present. The feeling of those present and the Committee was:

"(a) The House of Delegates in 1952 adopted a resolution establishing a minimum fee of $5 for the first visit and $4 for subsequent visits for compensation cases. The House resolved that this schedule be upheld in all county societies."

I don't believe we need an adoption of that portion of the report, sir, it is a statement of the facts, because it has already been passed by the House.

"(b) The special committee was authorized to discuss this resolution with the insurance carriers.

"(c) This Committee had no authority to arbitrate or establish a fee schedule contrary to the resolution of the House of Delegates of 1952."

And if I may read a portion of that which made us feel that it is on that report that they came to the Board of Trustees:

"Numerous claims for medical payment were considered, along with the amount of payment made by the various insurance companies. The majority of the bills were less than $25. In practically all cases the initial or emergency fee was paid. The subsequent visits were reduced to a fee of $3 in the average Compensation case.

"After considerable discussion pro and con regarding all phases of the problem, your Committee and the Claims Managers' Council Committee agreed on the following:

"1. New Jersey has no fixed schedule. It is our combined opinion that one would not be desirable."

The House of Delegates in 1952 passed that.

"Number 2. The fee of $5 is a reasonable one for an initial fee or treatment in the average Compensation case. The fee of of $3 in an average Compensation case is adequate, reasonable and fair."

This is obviously contrary to the resolution adopted by the House.

"Number 3. Negotiation of rates between the casualty insurance carriers and the individual doctors is the democratic method of handling the matter of fees and should be encouraged.

"Number 4. A committee of the Newark Casualty Insurance Claims Managers' Council would be glad to meet with the committee from any county medical society to discuss mutual problems."

As part of the discussion in this Committee it was definitely felt that a lot of work had to be done from the county level up, and I believe that should be the thing that will bring this about, as an experience from several of the counties that have done it. There is a lot of work to be done on that portion.

I move you, sir, the adoption of this portion of the report.

DR. ENGLANDER: I second the motion.

PRESIDENT LANCE: Is there a discussion?

SECRETARY GREIFINGER: I would like to amend that motion by adding: "subject to approval by our legal counsel."

DR. ENGLANDER: I second the amendment too.

PRESIDENT LANCE: There is a motion for approval of an amendment to Section (c), adding the words: "subject to approval by our legal counsel".

Is there a discussion?

DR. LEPREE: Why do we have to refer this to legal counsel?

SECRETARY GREIFINGER: I have been informed that the establishment of a fee schedule of $5 and $4 may be illegal because the Workmen's Compensation Act states that the fees should be at the local level.

DR. JOHNSON: In the discussions of the Committee that very point was brought up. The crux of it from the insurance carriers' view is that the fee for Compensation cases must be commensurate with the fee that is charged in the local area.

One of the counties in the state has established a fee of $5 and $4 as their regular first or average first and follow-up visit in their office, and I understand they have no trouble collecting those fees.

In our own County of Bergen, our legal adviser suggested that this form be sent out without labeling it as: what do you charge for compensation cases? but: What is your first visit and what is your subsequent visit for patients in your office? Five hundred cards were sent out and 368 were returned; and the average was $6.82 for the first visit and $4.32 for the second. That, at least, has established our average fee in Bergen County; and, as in Union County, it is the basis upon which we can work.

Dr. Greifinger is correct in the sense that the law states it shall be what is charged there, and the implication would be that this amendment or this resolution by the House of Delegates in 1952 should be directed to each county. Let those counties poll their membership and decide themselves what it shall be and then charge accordingly.

PRESIDENT LANCE: There is a motion to amend the motion for approval of Section (c) to read: "subject to approval by our legal counsel." It has been seconded. Is there further discussion?

All those in favor of the amendment will please say 'aye;' those opposed? (There were several Noes.)

All those in favor of the amendment please rise. Thank you. All those opposed will please rise. The amendment is approved.

All those in favor of the motion for the approval of Section 3 of this report will please rise—as amended. Thank you. All those opposed. It is so ordered.

DR. JOHNSON: "4. *Bergen County Resolution* re Workmen's Compensation Fees was approved and accepted in principle, but the Reference Committee feel it can be integrated with the resolution of the 1952 House of Delegates." (See page 11)

I move you the adoption of this portion of the report.

(The motion was seconded.)

PRESIDENT LANCE: Is there a discussion? All those in favor please say 'aye;' opposed? So ordered.

DR. JOHNSON: Mr. President, I move you the adoption of this report, as amended, as a whole.

(The motion was seconded.)

DR. SAMUEL M. DISKAN (Atlantic County): I just want to give one point of information here. I respect the Committee's opinions and the Trustees' opinions as well; however, as a member of the Public Relations Committee I wanted to point out that this Professional Estimate Form was an attempt to overcome one of the principal features of objection; namely, the uncertainty of—

PRESIDENT LANCE: Dr. Diskan, I'm sorry. This discussion is out of order. I'll ask the jury to disregard that. (Laughter)

All those in favor of the adoption of the report as a whole please say 'aye;' those opposed? It is so ordered. And my personal appreciation and thanks go to the Chairman and members of this Committee.

We will now ask for the report of the Committee on Resolutions and Memorials. Dr. Comando.

DR. HARRY COMANDO: Your reference committee received and hereby recommends approval of the following nominations for emeritus membership:

Atlantic County—J. Carlisle Brown, M.D., Margate; age 60; retired by reason of ill health; member in good standing since 1925.

Bergen County—Harriet L. Knox, M.D., Hackensack; age 82; retired by reason of age; member in good standing since 1900.

Conde deS. Pallen, M.D., LaJolla, Calif.; age 66; retired by reason of illness; member in good standing since 1925.

Christian P. Segard, M.D., Leonia; age 71; retired by reason of age; member in good standing since 1935.

Camden County — Ralph K. Hollinshed, M.D., Westville; age 70; retired by reason of age; member in good standing since 1909.

Essex County—Roy Griffith, M.D., Glen Ridge; age 66; retired by reason of ill health; member in good standing for over 20 years.

Lydia B. Hauck, M.D., Irvington; age 69; retired by reason of ill health; member in good standing since 1923.

Elbert S. Sherman, M.D., Newark; age 82; retired by reason of age; member in good standing for over 50 years.

Albert V. Simmons, M.D., Maplewood; age 70; retired by reason of age; member in good standing for over 20 years.

Leonard H. Smith, M.D., East Orange; age 78; retired by reason of age; member in good standing for over 20 years.

George H. Van Emburgh, M.D., Summit; age 61; retired by reason of ill health; member in good standing since 1920.

Ocean County—Anthony T. Yurevich, M.D., Lakewood, age 71; retired by reason of ill health; member in good standing for over 20 years.

Warren County—Edgar Brasefield, M.D., Phillipsburg; age 78; retired by reason of age; member in good standing for half a century.

DR. COMANDO: Mr. Chairman, I move the adoption of this part of the report.

DR. SHARP (Camden County): I second the motion, but I now ask for a suspension of the rules, Mr. Chairman, so that we may give special consideration to the name of Dr. Hollinshed.

PRESIDENT LANCE: Do I hear any objection? It takes a two-thirds vote to suspend the rules. Any objection? I hear none. You have unanimous consent. What is your resolution?

DR. SHARP: I move the adoption by this House of the following resolution:

WHEREAS Dr. Ralph King Hollinshed of Westville has for forty-six years been a member in good standing of The Medical Society of New Jersey, and

WHEREAS, Through all these years he has rendered to it distinguished and valuable services, and

WHEREAS, In 1943-44, as President of The Medical Society of New Jersey by his gifted leadership he added new luster to the name of the Society, and

WHEREAS, Now, in his seventieth year, he has been admitted to Emeritus Membership, therefore

BE IT RESOLVED, That The Medical Society of New Jersey through its House of Delegates hereby acknowledges its profound indebtedness to and deep affection for Dr. Hollinshed for the example and profit of his life to his fellow physicians and to all mankind.

PRESIDENT LANCE: You have heard the motion and the resolution. Any second?

(Many voices call "second it.")

It seems to be seconded by acclaim. Any discussion? All in favor say 'aye.' All opposed? Passed unanimously.

Now we get back to the orders of the day. The motion is to accept the first part of Dr. Comando's report of the Reference Committee on Resolutions and Memorials. Discussion? All in favor say 'aye.' All opposed? It is carried and the first part of this Reference Committee's report is approved.

DR. COMANDO: Next we considered a motion from the Auxilary about a proposed student loan fund. (page 49) As we approved it, it read as follows:

WHEREAS, Each year the Woman's Auxiliary to The Medical Society of New Jersey raises countless sums of money to aid nursing students, and

WHEREAS, Each year men have to discontinue their medical studies due to lack of funds, and

WHEREAS, The Medical Society of New Jersey has always expressed a profound interest in the welfare of its young physicians and medical students, and

WHEREAS, Requests for aid have been received by the Medical Society; therefore be it

RESOLVED, That The Medical Society of New Jersey be requested to consider the establishment of a student loan fund to assist the individual New Jersey student in meeting expenses incidental to his training in medical school.

DR. COMANDO: This resolution was unanimously approved by the Committee, and I move its adoption.

THE PARLIAMENTARIAN: A motion to *consider* establishing a fund or to *establish* a fund? The way it reads, it's "to *consider* the establishment of" the fund.

DR. COMANDO: We felt that, if passed, this would be presented to the Woman's Auxiliary for study.

DR. FRITTS: This resolution was originally presented by the Woman's Auxiliary to the Trustees. The Board then referred it to the House of Delegates for whatever they wished to do with it. And that is why it comes before you now. Dr. Comando moved that the House approve this. I'll second that motion.

DR. CHARLES ENGLANDER (Essex County): It seems to me that the resolution is a bit indefinite. I heartily endorse the intent of the thing, that we sum up the early part of the resolution, but I would like to see Dr. Comando recommend through his Committee that the resolution be sent to the Board of Trustees for appropriate study and action so that we can vote on it next year rather than ask us to designate it here. It may not be automatic.

DR. EDITH BROWN: This is a small point, but I do want to concur in the last remarks. This resolution needs a little more study. As a member of the American Medical Women's Association I already contribute to such a fund, so this means a second tax, in addition to the approximately five dollars which we have already given the AMA Educational Fund. It does seem that it needs a little more study.

DR. SCHAAF: I move that this be tabled and referred to the Board of Trustees.

DR. EDITH BROWN: I second that motion.

PRESIDENT LANCE: Since this is an undebatable motion, I will call for a vote . . .

PARLIAMENTARIAN: If you table a matter, it is, to all intents and purposes dead since the House will not act on it before *sine die* adjournment. What Dr. Schaaf means, I'm sure, is that he wants to refer this to the Trustees. So the motion should omit any reference to "tabling."

DR. SCHAAF: I don't care what you do to it so long as it goes to the Board.

PRESIDENT LANCE: All in favor say 'aye.' All opposed? Carried and so ordered.

DR. COMANDO: The next resolution that we considered, that on "hospital assessment of staff physicians" (page 10) was slightly reworded. The original resolution read: "Whereas, it has come to our attention that some hospitals assess staff physicians certain sums of money to be applied to hospital deficits, building campaigns, capital funds or similar purposes . . ."

The wording was amended to read as follows:

"Whereas, it has come to our attention that some staff physicians have been directly or indirectly assessed certain sums of money to be applied to hospital deficits, building campaigns, capital funds or similar purposes, and

"Whereas, some hospitals predetermine the amount to be given by each physician, basing that on such factors as rank, number of patients and other criteria, and

"Whereas, such a practice, no matter how designated, is in effect an involuntary tax, and is thus contrary to American principles; therefore, be it

"Resolved, that we unequivocally condemn the practice of assessing staff physicians; and be it further

"Resolved, that we urge each physician voluntarily to contribute to the hospitals of his choice as much as he can donate without hardship, provided that the amount of such contribution is to be determined only by the physician himself; and provided that no hospital impose any penalties, sanctions or restrictions on any physician by reason of the amount of his donation; and be it further

"Resolved, that a copy of this resolution be sent to: The Secretary of the New Jersey Hospital Association, the president or chairman of the board of each hospital in New Jersey, and to the chief of staff or medical director of each such hospital as well as to its administrator."

This resolution was passed unanimously by your Committee and I move its adoption.

(The motion was seconded.)

PRESIDENT LANCE: Is there any discussion?

DR. CLARKE: Mr. President, Ladies and Gentlemen: I thoroughly concur in the motive of the resolution, but I call your attention to the fact that the sentence which reads: "And provided that no hospital impose any penalties, sanctions or restrictions on any physician by reason of the amount of his donation"—that negates the intent of the resolution; and I will suggest that it be amended by striking out the words "and provided," and then just have it read: "That no hospital impose any penalties, sanctions or restrictions on any physician by reason of the amount of his donation."

PRESIDENT LANCE: You offer that as an amendment?

DR. CLARKE: I do, sir.

(The amendment was seconded.)

PRESIDENT LANCE: Is there a discussion? All those in favor of the amendment to delete the words "and provided" will please say 'aye;' those opposed? It is so ordered.

There is a motion for the approval of this section of the report. Is there a further discussion? All in favor please say 'aye;' opposed? It is so ordered.

DR. COMANDO: Now we come to the resolution about annual registration. Here it is:

WHEREAS, The Board of Medical Examiners of New Jersey cannot administer adequately the Medical Practice Act *with* accurate information as to those physicians duly licensed to practice medicine in this state who are presently so practicing, and

WHEREAS, the Board does not *now* have any satisfactory means of ascertaining the status of many practitioners of medicine,

RESOLVED, that The Medical Society of New Jersey endorse the principle of annual registration of physicians in New Jersey and that the Society take active steps promptly to implement the resolution by developing appropriate legislation to that end.

Our Committee considered this resolution very carefully and the resolution was approved. It was thought that such a law would help in the detection of unauthorized practice. I move its adoption.

(The motion was seconded.)

DR. SCHAAF: Correction, Mr. President. The Chairman read "with accurate information." It should be "without" accurate information.

THE PARLIAMENTARIAN: In the first whereas, in the third line, the word should be "without."

PRESIDENT LANCE: That is a typographical error which can be changed.

DR. SCHAAF: It's very major.

DR. CHESTER I. ULMER (Gloucester County): Mr. President, Members of the House of Delegates: How long can The Medical Society of New Jersey be static? Each year in its annual report, the State Board of Medical Examiners presents a plea for annual registration and this House has given it the brush-off. Each year this House passes measures designed to increase efficiency and yet it constantly keeps the State Board of Medical Examiners fettered.

Eight or nine years ago the records will reveal the same subject was discussed by the committee. I recall it vividly. Eight or nine of us, only eight or nine had the courage to speak for annual registration. In that group of eight or nine were Dr. Wendell J. Burkett and Dr.

Earl S. Hallinger, both members then of the State Board. I use the word courage because preceding us was a large group from Essex County headed by the eloquent and lamented Dr. Henry C. Barkhorn; and by his eloquence and by their numbers they swayed this House of Delegates with three simple arguments. They were: added regimentation for the physician; second, another form to fill out; and third, the fee, three dollars, perhaps. Those three illogical items swayed the House of Delegates nine years ago.

Annual registration can't be so bad. How many states have it, sir?

DR. COMANDO: Forty-four.

DR. ULMER: Forty-four. In our own State the pharmacists have it—I'm an ex-pharmacist—we enjoy it; we wouldn't repeal it. The dentists have it. I know no state nor group who has had it who has repealed it.

How long can The Medical Society of New Jersey be static? Thank you, Mr. President. (Applause)

DR. ELY: Mr. President, House of Delegates: This subject has been brought up many years. Somerset County had a representative on the Board of Medical Examiners, Dr. A. A. Lawton. We thought a great deal of Dr. Lawton. He gave a lot of his time, but he said: "We cannot do anything unless we have more money and the only way we can get money is through the doctors in the State." The State will not give money for that Board that we have representatives on. And I entirely endorse Dr. Ulmer's recommendation that we should consider it very carefully before we turn it down.

DR. ELMER P. WEIGEL (Union County): Mr. President, gentlemen of the House: I am most interested in this resolution. As you know, for a long time this matter has come up year after year and it has been turned down many times, I'm sure without adequate reason.

Now, with all due respect to Dr. Ely and his kind remarks in our behalf, at the present time we do not feel that the question of raising revenue by this registration is one of great consideration. There is ample money available today in the State Board of Medical Examiners' fund.

As you know, we no longer have any dedicated funds. Everything that is taken in is turned over to the State Treasury and each year we turn back to them thousands of dollars, so that we have adequate money to administer this Medical Practice Act, but we do not have adequate information which we can only get by this annual registration. Time and again we are surprised to find, when we investigate an individual, that he is practicing under the license of a man who has been dead for four or five years. There are approximately two thousand doctors who are not members of The Medical Society of New Jersey. We have no idea which of these men are dead, which have moved away, which have stopped practicing, and which, as I say, are practicing on licenses of men already dead.

The State Board of Medical Examiners sincerely hopes that you will pass this. We assure you that it will materially improve the quality of the service the Board can render every single member of this Society. (Applause)

PRESIDENT LANCE: Thank you, Doctor. Is there any further discussion? All those in favor of the adoption of this portion of the report will please say 'aye;' opposed? It is so ordered. (Unanimously) (Applause)

DR. COMANDO: Now here is a resolution of which we disapproved. We disapproved because we thought it presented a problem to be settled locally not on a state basis. The resolution itself—the one we rejected—reads:

> WHEREAS (possibly under suggestion of the Joint Commission on Accreditation and in fear of losing the said accreditation) hospitals are requiring routine admission blood counts and serological tests for syphilis to be done by their own laboratories, and
>
> WHEREAS, this occasionally requires blood tests that were done in the home or office in the differential diagnosis of appendicitis to be repeated within hours when the patient is admitted to the hospital, and serology tests to be repeated within days upon the re-admission of patients with chronic or relapsing illnesses, and
>
> WHEREAS, these practices increase the cost to the patient, add unnecessary work to the already overloaded laboratories and subjugate the professional work of a physician to the work of, as often as not, a technician-trainee,
>
> THEREFORE BE IT RESOLVED, that it is the opinion of this Society that these practices are not in the interest of the patient, sound medical economic practices, or good public relations,
>
> AND BE IT FURTHER RESOLVED, that this State Society hereby instruct its Delegates to the American Medical Association to introduce a memorial requesting a study of these alleged practices with the idea of pressing for their modification through appealing to or instructing the Joint Commission on Accreditation through proper channels of authority.

I now move, Mr. Chairman, approval of this part of the Reference Committee's report.

PRESIDENT LANCE: I'm not quite clear. Are you moving for its approval or disapproval?

DR. COMANDO: Disapproval of the resolu-

tion; approval of our recommendation. We rejected the resolution.

Dr. Englander: I second that motion.

President Lance: Is there a discussion?

Dr. Smith (Mercer County); Our hospital in Princeton recently wrote to the Accreditation Committee of the American Medical Association and other accrediting bodies to ask what the rule was. We wanted to drop the red count from required laboratory work, though we would keep the hemoglobin, white count, urinalysis and serologic test. We received the, surprising to us, reply that all that was required was a hemoglobin, a urinalysis and the serologic test for syphilis. If hospitals understood that, much of the confusion would disappear.

President Lance: Is there any further discussion? Then you are ready to vote. All in favor of the motion to approve will say 'aye.' If you approve this part of the report, you reject the resolution. Do you understand? The motion is for rejecting the resolution. If you call 'aye' you are approving the action of the Committee and rejecting the protest about laboratory work. Now, all in favor of this Committee action say 'aye.' Opposed? The 'ayes' have it. You have rejected the resolution protesting certain laboratory requirements and approved the action of your Reference Committee.

Dr. Comando: The last resolution concerned x-ray fees and Hospital Service Plan. We also rejected this resolution. Our action was unanimous. The proposed resolution was unanimously disapproved. The committee recommends that this resolution first be thoroughly discussed with and aired by the New Jersey Roentgenological Society; and that if the condition exists as stated, it should then be submitted to The Medical Society's Subcommittee on Medical Practice for further study and consideration. The resolution as presented reads:

WHEREAS, The Hospital Service Plan of New Jersey is making partial payments for x-ray examinations made by hospitals on outpatients, and

WHEREAS, such payments subsidize unfair competition with physicians who render such diagnostic services in their offices and thus represent an invasion of the private practice of medicine, and

WHEREAS, the Board of Trustees of The Medical Society of New Jersey has clearly stated in January 1948 and again in its report of March 1953 "that the sending of ambulatory private patients to hospitals for x-rays be discouraged where adequate facilities are available in private physicians' offices," and

WHEREAS, such expenditures by the Hospital Service Plan of New Jersey of necessity decrease funds available for the proper expansion of benefits to hospitalized patients, and their extension to groups not now included in the plan, particularly the aged,

THEREFORE, BE IT RESOLVED, that The Medical Society of New Jersey go on record as opposing these practices by the Hospital Service Plan of New Jersey and that a copy of this resolution be forwarded to the Hospital Service Plan of New Jersey.

We considered this resolution carefully. It was rejected unanimously. The Committee doubted that the condition existed as stated in a wide area. We thought it should be first considered by the Radiological Society of the State of New Jersey and then through proper channels submitted to The Medical Society of New Jersey. It could then go to our Medical Practice Committee.

Therefore, I move the acceptance of this part of the report, which rejects this resolution.

Dr. Englander: I second the motion.

President Lance: It has been moved that this portion of the report which rejects the resolution be approved. It has been seconded. Is there a discussion? All in favor say 'aye.' Opposed? The 'ayes' have it. You have approved of this action, which means that you have rejected the proposed resolution on x-ray payments.

Dr. Comando: I now move for the acceptance of the report as a whole, with the exception of the resolution on student loans.

Dr. Englander: I second the motion.

President Lance: Is there a discussion? All those in favor please say 'aye;' those opposed? It is so ordered. I wish to express our very sincere thanks to Dr. Comando and his Committee. These things are difficult to go through.

I would like to call now for the report of the Reference Committee on Miscellaneous Business. Dr. Albright.

Dr. Louis F. Albright: Mr. President and Members of the House of Delegates: The Reference Committee on Miscellaneous Business met yesterday afternoon with Drs. Matheke, Madaras and Hessert present. I wish to thank th se gentlemen as well as the other physicians who took part in our discussions.

We heard four reports; first the report of the Advisory Committee to the Woman's Auxiliary, written by Dr. Lewis C. Fritts. This report was received and read. The Committee on Miscellaneous Business recommends to the House of Delegates that the report be accepted.

Mr. President, I move for the adoption of this section of the report.

DR. ENGLANDER: I second the motion.

PRESIDENT LANCE: All those in favor say 'aye;' opposed? It is so ordered.

DR. ALBRIGHT: We next heard the report of the Annual Meeting Committee, prepared by Dr. Jerome Kaufman. "The report of the Annual Meeting Committee was received and read. The Committee on Miscellaneous Business recommends to the House of Delegates that this report be accepted."

I move the adoption of this section of our report.

DR. KAUFMAN: I second the motion.

PRESIDENT LANCE: All in favor say 'aye;' opposed? It is so ordered.

DR. ALBRIGHT: Next was the report of the Scientific Program Committee, prepared by Dr. Pessel. This report was received and read. "The Committee on Miscellaneous Business recommends to the House of Delegates that this report be accepted."

Mr. President, I move for the adoption of this section of the report.

DR. ENGLANDER: I second it.

PRESIDENT LANCE: All in favor say 'aye;' opposed? So ordered.

DR. ALBRIGHT: Our Committee on Miscellaneous Business wishes at this point to recognize the year-in and year-out efforts of the Chairmen of these two Committees, both of whom have a very difficult job; that is, Dr. Kaufman and Dr. Pessel, and their co-workers, and who are largely responsible for the excellence of the scientific program, the exhibits and many of the other features that make this annual meeting a standout. And every year we see these same two names on the program.

We next heard the report of the Scientific Exhibit Committee, prepared by Dr. Marvin Becker. This report was received and read. "The Committee on Miscellaneous Business recommends to the House of Delegates that this report be accepted."

Mr. President, I move for the adoption of this section of the report.

DR. BRODKIN: I second the motion.

PRESIDENT LANCE: All in favor say 'aye;' opposed? So ordered.

DR. ALBRIGHT: We then heard a referral from the Board of Trustees in relation to the Society for Widows and Orphans of Medical Men in New Jersey. This proposition and request for endorsement were presented by Dr. Wood. It was supported by statements of Dr. E. Zeh Hawkes, Dr. Stahl and Dr. Crane. Dr. Stahl requested that a fourth item be added to the ones which were reported in the April issue of the JOURNAL, the fourth item being: "That space be alloted without charge for an exhibit at the annual meetings." We agreed to accept this addition to the three points which were previously referred to us.

We heard the statements of Drs. Hawkes, Stahl, Crane and Wood, and I might say that "the Committee on Miscellaneous Business was impressed by the homely sentiment and tradition of this Society; that is, the Society for Widows and Orphans of Medical Men in New Jersey, as well as by its sound economic policy. The Committee on Miscellaneous Business sincerely recommends to the House of Delegates that appropriate action be taken to endorse this Society and to grant their specific requests as outlined in Paragraphs 2, 3 and 4" of the referral to our Committee. These read:

"2. Space in our publications (Membership News Letter and JOURNAL) so that the Society can be kept in the minds of all members of The Medical Society of New Jersey.

"3. That the Society be officially embraced by the appointment of a committee of the State Society, to be the Widows and Orphans Committee; such now exists in the State Auxiliary and in some county medical societies.

"4. That space be alloted without charge for an exhibit at the annual meetings.

"We might add that the Committee on Miscellaneous Business was sufficiently impressed to join the Society on the spot." (Laughter) "The Committee would suggest additional publicity at county level" be given.

We were interested to hear the Society has 634 members; has been in existence for 74 years; has funds to the extent of $78,000. Sounds better than Montgomery Ward.

PRESIDENT LANCE: This is not a paid advertisement. (Laughter)

DR. ALBRIGHT: No. It was interesting to hear from the men who gave us these statements.

I move the adoption of this portion of our report.

DR. WOOD: I second the motion.

PRESIDENT LANCE: Is there any discussion? All those in favor say 'aye;' opposed? It is so ordered.

DR. ALBRIGHT: I move the adoption of the report as a whole.

DR. GARDNER: Second the motion.

PRESIDENT LANCE: All those in favor please say 'aye;' those opposed? It is so ordered. And we thank you, Doctor, and your Committee.

Now I ask for the report of the Reference

Committee on Constitution and By-Laws. Dr. Mary Bacon.

Dr. Mary Bacon: Dr. Lance, Officers, Delegates: Your Reference Committee on Constitution and By-Laws met yesterday afternoon, April 18. Every member of the committee was there: Dr. Cottone, Dr. Newbury, Dr. Dodd, Dr. McCracken and myself. Last year this House accepted on first reading a proposal on Honorary Members—a rewriting of Section V of our Constitution. We approved it yesterday and recommend that it be re-affirmed here and thus become part of our Constitution. Let me read it, and this will constitute the final required reading.

ARTICLE IV

Section V. Honorary Members shall be physicians and surgeons who have attained distinction within the medical profession, or non-medical persons who have rendered signal service to The Medical Society of New Jersey, or who have attained special eminence in scientific fields other than medicine. Nominations shall be submitted by recognized medical groups to the Committee on Honorary Membership for approval or disapproval and the committee's action shall be transmitted to the Board of Trustees by December 1. Nominations approved by the Board of Trustees shall be officially sent to the component county medical societies at least three months before the annual meeting at which action is to be taken, and the approval of the majority of the component county medical societies shall be required to validate the nomination before it can be submitted to the House of Delegates. (Delete "and who")

Nominees may be elected by a two-thirds vote of the House of Delegates, (delete "after having been recommended by the Committee on Honorary Membership") providing the number of living honorary members does not exceed 15. Presentation of the honorary membership shall be made at the following annual meeting. Honorary members shall have all the privileges of members but shall not be members of the corporate body.

I move you, sirs, the approval of this portion of your committee's report.

President Lance: This requires a two-thirds vote; and if such vote is obtained, the Constitution is amended accordingly. Is there any discussion? All in favor say 'aye.' All opposed, say 'no.' I hear no "noes," and the motion is adopted unanimously and the Constitution amended accordingly. Now it would be perfectly in order to ask the Chairman of this Committee to read by title, perhaps to explain if necessary, and then for you to decide whether to adopt or reject. This, of course, implies that you are willing to accept the printed or duplicated sheets now in your hands, in lieu of a *verbatim* reading. This would save Dr. Bacon's voice and your time. If you prefer the full reading, we will continue on that basis. If you wish a reading by title only, we will do it that way. What is your pleasure, gentlemen?

Dr. Englander: Have they been checked for typographic errors?

Dr. Bacon: Yes. I checked them all personally.

Dr. Englander: Mr. Chairman, I move that a reading by title be construed as the equivalent of a reading *in extenso*.

Dr. Brodkin: I'll second that.

President Lance: Will all those in favor of this procedure indicate by saying 'aye,' please? And those who do not? With your consent, I'll ask Dr. Bacon if she will read the first paragraph* under each item in her report and then move for its adoption.

Dr. Bacon: The Committee on Constitution and By-Laws approves in principle the following proposed amendment to Article VI (Board of Trustees) with such rephrasing and additions as are needed to clarify and accomplish the obvious intent of the proposed amendment.* (See page 49).

ARTICLE VI—BOARD OF TRUSTEES

Section 1. The Board of Trustees shall be the executive body and shall be composed of the Immediate Past-President, President, President-Elect, two (2) Vice-Presidents, Secretary, and Treasurer (by virtue of their offices), and twenty-one (21) members, each member elected from and by his component county society prior to the annual meeting of the House of Delegates, which twenty-one (21) members shall each be elected for a term of three (3) years, such term to commence upon the expiration of the term of the former incumbent.

Section 2—Provided that at the first election the first seven (7) counties alphabetically, from Atlantic through Essex, shall elect for one (1) year, the second seven (7) counties, from Gloucester through Morris, for two (2) years, and the third seven (7) counties, from Ocean through Warren, shall elect for three (3) years. Thereafter at the expiration of these terms each Trustee shall be elected for three (3) years. After two (2) years Article VI, Section 2, shall be automatically deleted from the Constitution without further amendment.

Section 3. Any member as classified in Article VI, Section 1, may be elected a Trustee for a maximum of three (3) full terms provided however that if the first two (2) elected terms are successive there shall be a lapse of at least one (1) year between expiration of the second and commencement of the third terms.

By-Laws, Chapter VI, Section 5, line 12—delete "9" and revise to read "14" members shall constitute a quorum.

*Although only the title and first paragraph of each proposal was read, the full text is given in these *Transactions*.—Editor.

I move you, sirs, the approval of this portion of your committee's report. We have made no change in the principles. Under this proposal, the Board of Trustees would consist of the immediate Past-President, President, President-elect, two Vice-Presidents, Secretary, Treasurer and twenty-one members elected by the county societies, one member from each county society.

I may say that we have no minority report here, but there was one dissenting member.

DR. KUSTRUP: I second the motion.

PRESIDENT LANCE: It has been moved and seconded. Is there a discussion on this portion of the report as you have it? This constitutes a first reading and therefore will not become effective until action has been taken on it at the next annual meeting.

DR. RAYMOND A. TAYLOR (Ocean County): There is one thing I'd like to bring to your attention; that in the event of the death or inability of a Trustee elected by the county society to represent his county there is no provision in this for his replacement until the expiration of his term. I suggest that something be done to take that into consideration.

DR. HENRY B. DECKER (Camden County): I sat with the Committee during this meeting. I had no vote in it and was a spectator. I'm not entirely sure that as it is prepared it is suitable. It is a thing that requires a fair amount of study because it involves a number of other changes in the Constitution that the Committee apparently had no knowledge of. The purpose of this is to get county representation. Now, we have county representation on the Welfare Committee which hasn't functioned. If counties want representation it might be very much better for them to insist that the Welfare Committee function.

It is the expression of dissatisfaction with the control of the Society which has disturbed me just a little bit, because one member suggested that many things were decided in smoke-filled rooms. Well, now, if you know anything about this country, you know that some one has to take the initiative, some one has to discuss things very carefully and very fully before they can be presented. Whether it is in a smoke-filled room, a parlor over a cup of tea or in a tavern over a glass of beer, it is still going to be done, and changing the Board of Trustees is not going to remove the smoke-filled room.

One of the members who discussed it and was in favor of this did not know who the members of the Welfare Committee from his county were. He had no knowledge that they attended meetings or reported back to the county society.

So that I am not sure that it is proper that this is the first reading. I think it should be submitted for study and if a decision is made, presented in proper form at our next annual meeting.

PRESIDENT LANCE: As I read this portion of this report just such a recommendation is implied. They say: ". . . with such rephrasing and additions as are needed to clarify and accomplish the obvious intent of the proposed amendment." I assume that that is to be the recommendation of the Committee. Perhaps I am incorrect in saying this is the first reading.

DR. KAUFMAN: Mr. President, I move you that this portion of the report be tabled.

(The motion was seconded.)

THE PARLIAMENTARIAN: You understand that a tabled matter does not survive adjournment. If we adjourn without taking action, as we surely will, then this matter is dead.

Now, then, it can be brought up under the constitutional process by having somebody propose the amendment to the Committee on revision of the By-Laws and having it go through the Trustees to the component societies and be voted on next year. Is that your idea?

DR. KAUFMAN: That makes it two years.

PRESIDENT LANCE: The motion to table this portion of the report has been made and seconded. It is not debatable. All those in favor say 'aye;' opposed? The "noes" have it and the motion is lost.

DR. JOHN F. KUSTRUP (Mercer County): Dr. Lance, Members of the House of Delegates: It is the intent of those who presented this suggestion as to the change in the Board of Trustees not to criticize the Board of Trustees, for we feel that they have done a satisfactory, conscientious and commendable service. But there is no body that is so perfect that it can't stand improvement. We feel that this will improve and help clarify all the dealings within the State Society by beginning at the county level and bringing to the Board of Trustees the opinions that exist in the counties; that this will be a more democratic way of running the Society, and the Board of Trustees then can act in much the same relation to the House of Delegates that the Senate of the United States acts toward the House of Representatives. We feel that, in all, this will be a more efficient and effective way to run the Board of Trustees. (Applause)

PRESIDENT LANCE: Members of the House of Delegates, I find that I have been in error in indicating that this is a first reading of a proposed Constitutional amendment.

Our present Constitution provides that these things ". . . shall have been submitted in writ-

ing at a previous annual meeting, shall have been published in the JOURNAL of this Society, and officially sent to each component society at least three months before the annual meeting at which final action is to be taken."

In other words, this now is a proposed amendment and it is *not* the first reading.

DR. BACON: I move the approval of this portion of the record.

DR. BRODKIN: I second it.

PRESIDENT LANCE: Is there further discussion? All those in favor please say aye;' opposed? So ordered.†

DR. BACON: "The Committee on Constitution and By-Laws approves in principle the proposed amendment to By-Laws, Chapter VII, Section 1 through Section 9, with such additions and rephrasings as to assure the accomplishment of the obvious intent of the amendment. This does not amend the Constitution. It seeks to amend the by-laws. Here is the text:* (See page 49)

CHAPTER VII—JUDICIAL COUNCIL

Section 1. Election — The Councilors shall be elected as follows: At the first election of officers following the adoption of these By-Laws two (2) members shall be elected for a period of three (3) years, two (2) members for a period of two (2) years, and one (1) member for a period of one (1) year, and as the terms of these elected councilors expire new elections shall be for periods of three (3) years.

Section 2. Councilors — The Councilors collectively shall be known as the Judicial Council and shall constitute the supreme judicial body of the society.

Section 3. Meetings—The Judicial Council shall meet immediately following the election of officers for the purpose of organization. Thereafter the Judicial Council shall meet as often as may be necessary to transact its business at the call of the chairman. Three (3) members shall constitute a quorum.

Section 4. Duties of the Judicial Council—The duties of the Judicial Council shall be as follows:

(1) To act as an appellate tribunal and to hear and determine any and all appeals properly brought before it from any County Judicial Committee.

(2) To interpret and rule upon all questions of an ethical nature that shall confront the House of Delegates or any other board or committee of the society.

(3) To adjudicate all disputes or controversies arising within The Medical Society of New Jersey.

(4) To receive complaints or accusations from any source concerning the professional conduct or ethical deportment of members of this society for immediate reference to the appropriate County Judicial Committee.

(5) To receive, consider, and rule on any matter of discipline concerning any member or members of the society brought to the Judicial Council on appeal from a County Judicial Committee.

Section 5. Procedure for Considering Greivances.

(1) Any complaint, allegations or grievance concerning a member of the society when received by the Judicial Council shall be referred immediately to the chairman of the County Judicial Committee wherein the dispute or controversy arose for appropriate action in accordance with the recommended uniform procedures promulgated by the Judicial Council governing County Judicial Committees.

The County Judicial Committees of the various component societies shall have exclusive original jurisdiction over all complaints against a member of any component society or between members of the same or different component societies. In the event that any controversy arises between members of different component county societies the matter shall be referred to a joint committee comprised of the members of the County Judicial Committees of the counties involved. A chairman of such joint committee shall be selected at the time appointed for hearing.

(2) Upon receipt of such a complaint, allegation or grievance the County Judicial Committee shall make such investigation as may be required to determine all the relevant facts and circumstances and such investigation shall be conducted in a strictly confidential manner and in accordance with rules of procedure to be established by the Judicial Council. The physician concerned will have the right to appear in his own behalf.

(3) If after careful investigation the County Judicial Committee finds no cause for recommending disciplinary action against the physician or physicians involved, the case shall be closed and a report of such disposition shall be made to both parties and through the chairman to the Judicial Council of The Medical Society of New Jersey.

(4) If the County Judicial Committee finds that a complaint, allegation or grievance can be settled by conference or conciliation between or among the parties, or if the County Judicial Committee determines that the interests of the parties involved will be best served by the rendering of private advice to the physician in question, then the case shall be considered closed and a report of such disposition shall be made to both parties and to the Judicial Council.

(5) If the County Judicial Committee or the joint County Judicial Committees shall find after hearing that a complaint, allegation or grievance involves a matter which in its opinion would empower the State Board of Medical Examiners to revoke or suspend the license of a physician it shall be the duty of such committee forthwith by written complaint to refer the findings to the Judicial Council which shall in turn refer the complaint to the State Board of Medical Examiners.

Section 6. Special Procedure for Complaints Involving Fees for Professional Services.

(1) In a complaint involving the just or proper amount of a fee for professional services the County Judicial Committee shall first investigate and attempt to effect an amicable settlement. If it shall

†This action was subsequently invalidated by the Board in accordance with opinion of counsel.

be unable to reconcile the differences between the parties then it may determine the fee which it considers just and proper under all the circumstances of the particular case, stating in writing the basis on which the fee has been determined.

(2) If the society member against whom the complaint is brought shall agree to abide by the decision of the County Judicial Committee and shall register this agreement with the complainant in a form to be prescribed for this purpose then the case shall be considered closed and a report shall be rendered by the chairman to the Judicial Council.

(3) If, however, the member shall agree to the amount of the fee so fixed but fail to abide by his agreement then the County Judicial Committee may cite such member for contempt and take appropriate action thereon.

(4) If a member fails to accept the determination of the committee as to a just and proper fee the committee shall then proceed in accordance with the recommended uniform By-Laws hereinabove referred to in Section 5.

Section 7. Appeals.

(1) Any member of the component county society aggrieved by an action of the County Judicial Committee, or any applicant for membership who has been excluded from membership by a county society, or any lay person aggrieved by an action of the county society Judicial Committee may appeal from the decision or action of the county society or the County Judicial Committee to the Judicial Council.

(2) Decision of the said Judicial Council in any matter so appealed shall be final, except that further appeal may be taken by either party to the Judicial Council of the American Medical Association if the subject of the dispute falls within the jurisdiction of that Council.

(3) Any appeal to the Judicial Council of The Medical Society of New Jersey must be filed with the Judicial Council within forty-five (45) days of the date of the formal notice to the aggrieved party of the action of the component county society or of the county Judicial Committee.

(4) Form of notice of appeal and procedure in hearing and adjudication of same shall be in accordance with the rules of procedure to be established by the Judicial Council, which shall be made available to the parties involved.

(5) Upon filing a notice of appeal the appellant and the component society or county society Judical Committee will be required to submit to the Judicial Council all records and papers relative to the matter under appeal, all such papers shall be treated confidentially by the Judicial Council.

(6) The Judicial Council may affirm, modify or reverse by a majority vote of its members present and voting, the appealed decision.

(7) The Judicial Council may summon witnesses, take new evidence, and investigate the appealed matter in any manner in their opinion required to develop the information necessary for a proper decision.

Section 8. Administrative and Procedure.

(1) The administrative and legal costs of the operation of the Judicial Council shall be underwritten by The Medical Society of New Jersey in accordance with an annual appropriation for these purposes, to be approved by the House of Delegates.

(2) Every matter coming before the Judicial Council shall be considered in a strictly confidential manner. Its records shall be subject to inspection exclusively by members of the Council and by legal counsel for the society. Except for purposes of consultation or testimony no member or officer of the society save legal counsel, the executive officer of The Medical Society of New Jersey, and a stenographer, when his presence is deemed advisable by the members of the Council, shall be present at a meeting of the Council when any appeal or other matter is under consideration.

(3) In pursuance of their investigatory and judical functions the County Judicial Committees as well as the Judicial Council shall have authority to summon members of the society to appear and testify either in connection with the complaint involving the member summoned or as witnesses in cases involving other members. Should any member fail to respond to such a summons the County Judicial Committee or the Judicial Council of The Medical Society of New Jersey shall be and hereby is authorized to cite such a member to his component society for contempt. Such a citation shall be considered equivalent to a charge of unethical conduct but shall be dealt with by the County Judicial Committee in accordance with the provisions of the recommended uniform procedures of said committee herein referred to.

(4) The Judicial Council shall make public and from time to time in its discretion, revise and amend rules and regulations relating to procedure before County Judicial Committees and on appeal. Such rules and regulations shall specify periods of notice, procedure for disposition of complaints against physicians who are not members of the society, procedure for notification to complainants and defendants, the nature of the charges advanced, maintenance of proper records, and such other rules of procedure as may be deemed necessary and proper.

Section 9 of Chapter VII of the By-Laws is hereby repealed and deleted.

DR. BACON: The major effect of this is that it does away with the District Judicial Council which has never really functioned. Instead it permits the County Society's Judicial Council to communicate directly with the Judicial Council of The Medical Society of New Jersey. I now move adoption of this part of the report.

DR. ENGLANDER: I second the motion.

PARLIAMENTARIAN: Just a minute. Was this proposal acted on at any earlier meeting of the House of Delegates this year?

MRS. MADDEN: Yes. It was presented on Sunday.

PARLIAMENTARIAN: Then this is a second reading. If the House so desires, this proposed By-Law can be adopted now. This is not a constitutional amendment; it is a change in the By-Laws.

PRESIDENT LANCE: Since this proposal was read at our first meeting Sunday, this is the second reading now and it can be enacted now if you gentlemen so desire.

DR. ENGLANDER: I move its enactment.

DR. KAUFMAN: Second Dr. Englander's motion.

PRESIDENT LANCE: Further discussion? All in favor say 'aye.' All opposed say 'no.' I hear no contrary votes. You have unanimously changed this By-Law.†

DR. BACON: I move you, sirs, the approval of the report of the Reference Committee on Constitution and By-Laws in its entirety, as amended.

DR. KAUFMAN: I second the motion.

PRESIDENT LANCE: All those in favor please say 'aye;' all those opposed? It is so ordered. Dr. Bacon, I thank you, in the name of the Society, for this report.

DR. FRITTS: Mr. President, I ask the House for suspension of the rules to permit introduction of a resolution concerning the Presidency of the American Medical Association.

PRESIDENT LANCE: Is there any objection to the suspension of the rules for this purpose? I hear none. You have unanimous consent, Dr. Fritts.

DR. FRITTS: I wish to present a resolution to the House of Delegates, as follows:

Whereas, Doctor David B. Allman has won deserved renown as one of the truly outstanding physicians of the State of New Jersey, and

Whereas, He has proved himself an illustrious leader in all phases of medical organization and activity at both State and national levels, and

Whereas, Doctor Allman is, in all regards, a man in whom we, his colleagues of The Medical Society of New Jersey, are preeminently well pleased; therefore be it

Resolved, that the House of Delegates of The Medical Society of New Jersey proudly offers his name as a candidate for the high office of President of the American Medical Association, and directs the New Jersey Delegates to the American Medical Association do all in their power to further his candidacy for the office of President-Elect of the American Medical Association in 1956.

(Applause)

DR. FRITTS: I move this resolution.

DR. DECKER: I second it.

PRESIDENT LANCE: Well gentlemen, I see you are already rising in favor of this. All in favor, please rise.

(The Delegates rose and applauded.)

I think it obvious that the motion is adopted by acclamation.

†This change was subsequently invalidated by the Board, in accordance with opinion of counsel.

PRESIDENT LANCE: All of you are probably aware that this morning's newspapers carried the notice of the death of Dr. Albert Einstein who lived and died in our state. I do not think there is any reason why this Society should not take appropriate action and I suggest that some one may wish to move that we take recognition of his services and his contribution at the time of his death, by asking that our Executive Officer dispatch an appropriate resolution in the name of this Society.

DR. ENGLANDER: I move that the Executive Officer be instructed to draft and dispatch a resolution on the death of Albert Einstein.

DR. KAUFMAN: I second that motion.

PRESIDENT LANCE: Discussion? All in favor say 'aye.' Opposed? The motion is unanimously carried.

The resolution as subsequently drafted by the Executive Officer and sent to Dr. Einstein's family was:

WHEREAS, By his intrepid genius Albert Einstein endowed the world of science beyond calculation, to the benefit of all mankind, and

WHEREAS, By his passing all men are the poorer, as all were the richer by his living, and

WHEREAS, It is the wont of medicine to acclaim and extol all who seek and advance the public good, therefore be it

RESOLVED, That The Medical Society of New Jersey honors Albert Einstein in death as in life, and be it

FURTHER RESOLVED, That The Medical Society of New Jersey hereby expresses to the members of the family of Albert Einstein its sincere condolences in their great bereavement.

PRESIDENT LANCE: At this time it is my privilege to present to you the gentleman whom you yesterday elected to be your Second Vice-President. Many of you know him, know his good work for the Society. I'd like to ask at this time that Dr. Kenneth Gardner stand up so they can see him from the table up.

(Applause)

It is my pleasure now to introduce to you Dr. Earl Halligan.

DR. EARL J. HALLIGAN: Mr. President, Members of the House of Delegates, Ladies and Gentlemen: I realize it is a privilege for me to address you and an honor conferred upon me to be able to present to you your incoming President. I know that there are many more people here who would be able to do it more adequately than I.

As I stand here, a glaring example of pretense comes to mind. In one of the smaller cities of New Jersey I remember a young matron who had many social aspirations. She also had a husband who had been a hero in

the Far East during the late war. He had won many decorations and came home with many souvenirs and medals, but, unfortunately, he didn't help her in her social aspirations. In desperation, in going through his effects she found a medallion. It looked unique and exotic. She thought, that if she wore it it would impress the other members of the societies to which she belonged. She wore it and they were duly impressed.

One day, the women's club invited a visiting professor to talk to them. He quoted in Chinese many Chinese philosophers. She went up to him and said: "Professor, I have a medallion, a medal here with Chinese writing on it. I want to know what it says." On past occasions she had given the impression to her friends that the Chinese Government had awarded it to Joe to give to her because of his bravery.

This professor looked at her and he said: "Madam, do you want me to tell you right here or would you like me to tell you in private?"

"Oh," she said, "I want my friends to hear it."

He said: "Madam, it says there that you are a licensed prostitute from Hong Kong." (Laughter)

I would like to say a few words on what we think of Dr. Butler in Hudson County. I've known him as man and boy for many years. Dr. Butler was born in Jersey City; was raised in the same district with that great Governor, A. Harry Moore. He attended St. Peter's College where he received the degree of Bachelor of Arts in 1914. In 1915, he was made Master of Arts, and that same institution, in 1954 honored him with the degree of Master of Science *honoris causae*.

When he left St. Peter's, he went to the College of Physicians and Surgeons of Columbia University, and in 1919 he was graduated from that institution. He then spent three years interning in Bellevue and in St. Vincent's Hospital. Following his internship, he entered the general practice of medicine in Jersey City in 1922; and in 1929 he specialized in urology.

Right from the beginning we knew that Dr. Butler was going to become a leader in medical affairs. He was not only interested in organized medicine, but interested in the educational and scientific activities of our own community.

Dr. Butler has gone through all the offices in our county society. He was the secretary, the vice-president and the president, and he is still a member of the Hudson County Medical Society.

He has been a member and Chairman of the Judicial Council of The Medical Society of New Jersey. At present, he is the Chief Medical Examiner of Hudson County. He is a Trustee and Chairman of the Education Committee of the New Jersey Division of the American Cancer Society. He is President of St. Francis Hospital medical staff. He is a veteran of World War One and served as a member of the Advisory Committee of the Selective Service Commission in World War Two.

Dr. Butler is a diplomate of the American Board of Urology, and a Fellow of the American College of Surgeons. He is a member of the American Urological Association, a member of the New York Urological Society, and a member of the Society of Surgeons of New Jersey. He is attending urologist at St. Francis Hospital, the Margaret Hague Hospital and the Jersey City Medical Center. He is consulting urologist to St. Mary's Hospital, Hoboken, and to the Bayonne Hospital.

From 1929 to 1936 he was Assistant Clinical Professor of Urology in the New York Post-Graduate Hospital.

In 1954 he was made a Papal Knight of the Order of St. Gregory, the Great.

In 1928 Dr. Butler married a beautiful and charming girl, Rutheilene Lynch of Hackensack. They have three children of whom they may be well proud; the oldest, Dr. Vincent P. Butler, Jr., is now an intern in the Columbia Presbyterian Medical Center; the second, Mrs. Daniel Sullivan, is living in San Antonio, Texas; and the third, James D. Butler, is a senior in Georgetown University.

It sounds like a Horatio Alger story, for you who have read those when you were young—a story of success; an illustrious member of our profession.

Many years ago when I was an intern we had a professor at the hospital, Dr. Charles Namma, who was Professor of Medicine at Cornell University. Dr. Namma not only taught us medicine and other things; he taught us some practical things. He used to say: Never take a political job. But one of his teachings was how to become a professor. He said there were three ways to become a professor. The first was to marry a professor's daughter. The second, he said, was to endow a chair for the university; and the third way was by hard work.

Now, The Medical Society of New Jersey has honored Dr. Butler. It has made him the President of this Society — the highest award that could be given to him. I think that in itself is a great achievement. However, there is only one way to attain that, and that is by hard work, interest and initiative, financial loss,

self-sacrifice, depriving one's self of pleasure and giving unstintingly of your time and energy. In addition to that, one has to win the respect, confidence and the friendship of the members of the Society. All these Dr. Butler has done.

We feel, and I'm sure you do, too, that Dr. Butler is a fearless leader. There is no question about his executive ability. He is a wise counsellor. By experience with his activities in the local, state and national organizations, he is well versed in the ways and the lore of medical organizations and I'm sure that an idealist such as Dr. Butler and under his great and competent leadership that The Medical Society of New Jersey will continue to progress. Not only will its traditions be maintained, but I'm sure they will be enhanced.

It is my honor to present to you, and it is a real privilege to present to you my friend, Dr. Butler, the present President of The Medical Society of New Jersey.

(The Delegates rose and applauded.)

President Butler: Dr. Halligan, Dr. Lance, Members of the House of Delegates: Thank you very, very much, Dr. Halligan, for those flattering comments.

To say that I am flattered and honored by the the highest distinction that you have given me in making me the President of The Medical Society of New Jersey is certainly a gross under-statement. I am truly appreciative of it and I hope that I may be able to live up to some of the things that are expected of me.

But when one reaches this very high and very important point, he begins to feel more how unimportant he really is, because by myself I feel that I can do very, very little. I do not feel that I am the President of *my* Society nor I do not feel that I am the President of *your* Society, but I feel that I am the President of *our* Society, and that what has to be accomplished cannot be accomplished unless I receive all of the efforts and cooperation that are necessary to receive from you. This I ask of you and this I am sure that I can depend on.

There are so many things that need to be done. I must continue the fine work that my predecessor has done. I couldn't think of doing so without a tremendous amount of help. I needn't tell you of all the things: the extension of medical care, the problem of chronic illness, civil defense, legislation, public relations and all of those things, no one of which am I silly or foolish enough to think is going to be completely resolved during the 13-month period in which I will be in the Presidency. But I do hope to be able at the end of that time to say that I have accomplished something towards their fruition.

In that respect I would like to pay my compliments to my predecessor, Dr. Lance, who has had a very trying but a very productive year, and I know I can lean on him for what support I need from his experience and his guidance. Likewise, my other colleagues, the officers, I beg of them, as of you, and I'm sure I will receive their cooperation. If that is true, then at the end of my term maybe I can return here and point at least with some pride to some mild accomplishments at least in this coming year.

With those few remarks, and indeed again with the expression to you of my sincere gratitude for having so honored me, I will now, if there isn't something else to come before this House, declare the 189th annual session of the House of Delegates closed.

Is there anything else to be brought before the House at this time? If not, the meeting stands adjourned. Thank you very much.

(Applause)

At 12:15 p.m. the House adjourned *sine die*.

REPORTS, RESOLUTIONS, AND AMENDMENTS

TREASURER'S REPORT

Jesse McCall, M.D., Newton
(To Reference Committee "B")

BALANCE SHEET—April 15, 1955

GENERAL FUND

ASSETS

Cash	$226,602.69
Accounts Receivable	2,349.78
Inventory Maternal Welfare Record Books (at cost) - (contra)	1,669.50
Investments—U. S. Savings Bonds	27,500.00
Land, Buildings, and Equipment (contra)	100,896.27
Total	$359,018.24

LIABILITIES AND SURPLUS

A.M.A. Dues Payable	$ 1,250.00
Assessments Collected Applicable to Succeeding Year	88,445.00
House Committee Reserve	7,918.48
Annual Meeting Reserve	15,010.22
A.M.A. Dues Collection Reserve	581.99
Membership Directory Reserve	5,722.13
Medical Journal Reserve	3,151.75
Payroll Taxes Deducted	1,578.52
Land, Buildings, and Equipment (contra)	100,896.27
Maternal Welfare Record Books Reserve (contra)	1,669.50
Surplus	132,794.38
Total	$359,018.24

PERMANENT CAPITAL FUND

Cash	$ 3,565.25
Investments	11,500.00
Total	$ 15,065.25

STATE OF RECEIPTS AND DISBURSEMENTS FOR FISCAL YEAR 1954-55 — June 1, 1954 - April 15, 1955

RECEIPTS

Cash on Hand, June 1, 1954 ..... $190,964.41

Assessments:	A.M.A.	State	Total
Atlantic County	$ 3,675.00	$ 4,405.00	$ 8,080.00
Bergen County	12,137.50	15,141.25	27,278.75
Burlington County	1,875.00	2,280.00	4,155.00
Camden County	7,225.00	8,860.00	16,085.00
Cape May County	800.00	1,020.00	1,820.00
Cumberland County	1,800.00	2,410.00	4,210.00
Essex County	31,525.00	39,267.50	70,792.50
Gloucester County	1,475.00	1,780.00	3,255.00
Hudson County	12,595.00	15,645.00	28,240.00
Hunterdon County	975.00	1,230.00	2,205.00
Mercer County	8,062.50	9,513.75	17,576.25
Middlesex County	6,175.00	7,775.00	13,950.00

Monmouth County	4,650.00	6,373.75	11,023.75
Morris County	4,500.00	5,755.00	10,255.00
Ocean County	1,200.00	1,520.00	2,720.00
Passaic County	11,350.00	14,853.75	26,203.75
Salem County	975.00	1,105.00	2,080.00
Somerset County	2,225.00	2,575.00	4,800.00
Sussex County	900.00	1,155.00	2,055.00
Union County	12,725.00	15,560.00	28,285.00
Warren County	925.00	1,130.00	2,055.00
Total	$127,770.00	$159,355.00	$287,125.00

A.M.A. Dues Refunds	137.50	
1953 Membership Directory	52.50	
Journal Advertising (net)	32,630.34	
Commercial Exhibits	12,367.60	
Interest Income	1,213.55	
Sale of Maternal Welfare Books	910.00	
Rents	390.00	
Payroll Taxes	1,578.52	
Refund of Budget Expenditures 1954-55	733.96	
Janitorial Services	45.00	
A.M.A. Dues Collection	1,230.87	
Sale of Securities	7,500.00	
Miscellaneous	18.06	
Accounts Receivable	840.21	
Prior Year State Assessments	125.00	
Total Receipts		346,898.11
TOTAL		$537,862.52

DISBURSEMENTS

BUDGET ACCOUNTS		
A- 1—Executive Salaries	$31,108.31	
A- 2—Executive Office Salaries	16,864.97	
A- 3—Executive Office Expenses	1,336.16	
A- 4—Executive Travel	1,413.36	
A- 5—House Maintenance	8,354.30	
A- 6—Treasurer	1,597.12	
A- 7—Finance and Budget Committee	71.37	
A- 9—Audit	450.00	
A-10—Secretary	2,602.82	
A-11—Salary Taxes	825.79	
A-12 Insurance	1,235.96	
B- 1—Journal Publication	5,000.00	
B- 5—Journal Office Expenses	361.29	
B- 6—Journal Travel	8.74	
C- 2—Welfare Committee	496.84	
C- 3—Legislative Committee	3,260.91	
C- 4—Public Health Committee	600.49	
C- 5—Public Relations Committee	4,450.69	
C- 6—Medical Practice Committee	608.33	
D- 1—President and Other Officers	2,719.71	
D- 2—A.M.A. Delegates	4,481.21	
D- 8—Woman's Auxiliary	5,747.25	
D-13—Medical Education Committee	25.70	
D-20—Medical-Dental Liaison Committee	155.50	
D-21—Medical-Hospital Liaison Committee	25.70	
D-22—Medical-Legal Liaison Committee	91.82	
D-23—Membership, Directory, Physicians Placement Service	2,067.07	
D-24—Medical Research Committee	112.59	
D-25—Medical School Committee	5,133.69	
D-26—Medical-Pharmaceutical Liaison Committee	40.94	
D-27—Emergency Medical Service, Civil Defense Committee	84.99	
E- 1—Board of Trustees	1,480.87	
E- 2—Contigent	5,651.79	
E- 4—Judicial Council	218.31	
F Legal	511.20	
TOTAL BUDGET ACCOUNTS		$109,195.79

Accounts Payable, May 31, 1954	2,815.98
Annual Meeting	4,520.33
Journal Publication	21,822.01
Commissions	5,700.48
Accounts Receivable	648.35
Janitorial Service	95.00
A.M.A. Dues	127,582.50
A.M.A. Dues Collection Expenses	1,346.12
Assessments Refunded	260.00
House Committee Reserve Expenses	2,196.12
Purchase of Investments	35,000.00
Budget Expenditures, 1953-54	77.15
Total Disbursements	$311,259.83
Cash Balance, April 15, 1955	226,602.69
TOTAL	$537,862.52

For action, see page 21.

REPORT OF THE FINANCE AND BUDGET COMMITTEE

David B. Allman, M.D., Chairman, Atlantic City
(To Reference Committee "B")

I. *Employees' Pension Plan*

The 1954 House of Delegates approved a recommendation of the Reference Committee that a pension plan be adopted for the employees, and that the Board of Trustees appoint a committee to study several pension plans and report back to the House in 1955.

Such a committee was appointed by the Board of Trustees; the following pension plan for the Society's employees was developed and approved by the Board:

a. Effective date—June 1, 1955.
b. The Medical Socicty of New Jersey to pay all costs.
c. Benefits to be monthly life income, 10-year certain basis; to be paid to the retired employee, or his-her beneficiary, at age 65.
d. Normal retirement date to be anniversary date of the plan nearest the employee's 65th birthday.
e. Equity to be 10% for each year of future service.
f. Past service to be computed at 1% of present monthly salary times number of years of service less four (less four, when all employees received yearly bonuses).
g. Future service for present employees to be computed at 40% of averaged monthly salary for 5 years preceding normal retirement date. Future service for new employees to be computed at 1% of monthly salary for each year of service after 3 years of continuous service and after attaining age 25.
h. No new employees to be eligible for participation in the pension plan if over 45 years of age, unless the employee is under age 50 and personally pays the back premiums to age 45.
i. Future clerical and stenographic staff members to be under age 30 when employed.
j. New employees to receive normal increments and 5% bonus for three years until they become eligible for participation in the pension plan.
k. Yearly premium—$11,058.60.

II. *1955-56 Budget*

Attached is a copy of the requested budget for 1955-56 which has the approval of your committee and the Board of Trustees.

III. *1956 Assessment*

In figuring the per capita assessment for 1956, the actual figure required to meet the budget is $33.49. The committee has recommended, and the Board of Trustees has approved, that the 1956 assessment be $25.00 per member and that the balance required be taken from surplus.

IV. *Recommendations*:

a. That the Proposed Pension Plan for Employees be approved.
b. That the attached budget for 1955-56 in the amount of $160,409.00 be approved.
c. That the per capita assessment for 1956 be $25.00.

PROPOSED BUDGET FOR 1955-56

A-1	Executive Salaries	$ 47,890.00
A-2	Executive Office Salaries	24,370.00
A-3	Executive Office Expenses	2,000.00
A-4	Executive Travel	1,680.00
A-5	House Maintenance	9,199.00
A-6	Treasurer	2,500.00
A-7	Finance and Budget Committee	250.00
A-9	Audit	600.00
A-10	Secretary	3,000.00
A-11	Salary Taxes	1,440.00
A-12	Insurance	1,727.00
B-1	Journal Publication	5,000.00
B-5	Journal Office Expenses	500.00
B-6	Journal Travel	100.00
C-2	Welfare Committee	800.00
C-3	Legislative Committee	7,500.00
C-4	Public Health Committee	1,400.00
C-5	Public Relations Committee	9,300.00
C-6	Medical Practice Committee	1,000.00
D-1	President and Other Officers	4,500.00
D-2	A.M.A. Delegates	8,000.00
D-8	Woman's Auxiliary	6,303.00
D-13	Medical Education Committee	100.00
D-20	Medical-Dental Liaison Committee	250.00

D-21	Medical-Hospital Liaison Committee	250.00
D-22	Medical-Legal Liaison Committee	250.00
D-23	Membership, Directory, and Physicians' Placement	1,000.00
D-24	Medical Research Committee	250.00
D-26	Medical-Pharmaceutical Liaison Committee	250.00
D-27	Emergency Medical Service, Civil Defense Committee	250.00
D-28	Medical-Nursing Liaison Committee	250.00
E-1	Board of Trustees	2,000.00
E-2	Contingent	15,000.00
E-4	Judicial Council	500.00
F	Legal	1,000.00
		$160,409.00

For action, see page 21.

REPORT OF MEDICAL DEFENSE AND INSURANCE COMMITTEE

J. Wallace Hurff, M.D., Chairman, Newark
(To Reference Committee "B")

Accident and Health Insurance

Our accident and health insurance program has continued to show a sound steady growth in the number of policyholders through the years and last year was no exception. The number of policyholders stands at an all time high of 3,385—in excess of 75% of the eligible members of our State Society.

Claims during the year were paid to over 394 members. The smallest claim paid was $13.33 and the highest was $6,300.

We have continued to receive many testimonial letters from satisfied claimants and no claimant for benefits had need of recourse to your Committee on Medical Defense and Insurance for arbitration, which is the unique feature of our policy. Apropos of arbitration our health and accident policy is, as far as we know, the only policy of its kind in the United States in which the duly appointed Insurance Committee of our State Society has the sole power of decision in any controversial case. Alfred M. Best & Company who rates insurance companies continues to give the National Casualty Company, the underwriter of our plan of accident and health insurance, the rating of A-plus (excellent) which is the highest rating that any insurance company can obtain. Ratings take into consideration a company's claim procedure as well as their financial standing. As of January 1, 1955 the financial statement of the National Casualty Company shows assets as it bears to liabilities to be in the ratio of two to one.

In our previous report we indicated that our group plan of accident and health insurance with the National Casualty Company through our brokers, E. & W. Blanksteen was part of the "Blanksteen Pool" of professional societies from coast to coast which a year ago numbered approximately 35,000 professional policyholder participants. The "Pool" has been further strengthened during the past year to the point where there are now more than 43,000 lives in these groups.

In the March issue of The Journal of The Medical Society of New Jersey there appears a notation that 23,000 doctors in the United States had passed the age of 65, 19,000 of which were still actively engaged in practice of medicine. Within this group New Jersey has its proportionate share. Your Committee calls your attention to the fact that it is most exceptional to find any health and accident policy which will provide coverage beyond the age of 65. Your Society contract provides coverage irrespective of age if the individual physician obtained his coverage before his 65th birthday, being actively engaged in the practice of medicine and in good standing in our State Society. Investigation by your Committee discloses the fact that this lack of restriction on age is one of the most valuable features of our health and accident contract.

Recommendation

The Committee recommends that the National Casualty Company through the representation of E. & W. Blanksteen be continued as they have served the Society well and their policy is the best offered for group protection.

Professional Liability Insurance

It has been a privilege for your Committee to have served in behalf of The Medical Society of New Jersey, during the past year. Needless to say, the work of this Committee is at all times interesting, but quite arduous. As you know, our duties bring us in contact with the heartaches, and sometimes the dissentions of some of our members.

In presenting our Annual Report we would call your attention to the article prepared by your Committee and appearing in the March issue of our State Journal. You will find therein a resumé of the malpractice situation, within our state, emphasizing the salient points of the malpractice problem.

It must be realized that we are passing through a transitional period in which it is most difficult to prognosticate or evaluate our future. This period of uncertainty has caused deep concern on the part of many of our insured members, particularly from the standpoint of premium cost and scope of coverage. Your Committee has been swamped with inquiries by telephone and mail, relative to these problems.

We have endeavored to answer all of these inquiries to the best of our ability. There has also appeared among certain state members of National Groups the impression that their premium rates were excessive for the type of practice rendered. We have made an exhaustive study and compiled statistical data which enables your Committee to assure you the past rates are not only justified but necessary and no one group has been unjustifiably assessed. We deem it important to call your attention to the fact that our present premium rate is not established by our insurance carrier. It represents a composite picture of medical liability cost in the state of New Jersey, or sections thereof and is compiled by the National Bureau of Casualty Underwriters and approved by the Department of Banking and Insurance.

Your Committee through studies compiled by our organization was able to predict in advance the probability of a premium rise in 1955, and brought this to your attention in our Annual Report of 1954. There are several factors worthy of note, which

have made this study possible. First, your Committee has received the highest cooperation from the Insurance Company relative to statistical data, much of which is confidential and cannot be published. Second, through this we have been able to break down the claim experience into group classifications of practices and losses on county level. Third, sufficient statistical data has been accumulated to ascertain the status of the entire picture. We are willing at all times to present information on pertinent questions to interested individuals.

On December 8, 1954 your Committee met at our Trenton Office with representatives of many of our County Societies at which time we endeavored to acquaint them with general problems of our medical liability insurance. The meeting was a new venture and we hope to continue these sessions in the future.

At our 1954 meeting our House of Delegates approved the recommendation of the Committee relative to polling our insured membership with the idea of obtaining further information on our malpractice problem. This poll has been completed and the response of our membership has been most gratifying. To date there has not been sufficient time to tabulate the results.

Your Committee has recently met with representatives of the insurance company at which time we reviewed the loss experience for the year 1954-1955. It indicates that although the losses are as high by comparison as the last two or three years, the number of claims are slightly lower (95 compared with 107). This is encouraging because it must be realized that every new drug, new apparatus, and new modality represents a new field of liability and any reduction of claims is looked upon by your Committee as a hopeful sign. The number of claims may not be impressive, but when you compile a ten year period and find 839 claims have been reviewed by your Committee you can readily appreciate the fact over a period of twenty years over 1600 doctors will be exposed to litigation. To those who are carrying minimum coverage we would be derelict if we did not recommend adequate protection; for example, we had three cases last year in which physicians were carrying minimum coverage and the verdicts were far in excess of their policy limits.

The prevention of suits should be of deep concern to every doctor. We are taking the liberty of referring you to a reprint of an article which appeared in the March issue of Medical Economics, representing an unbiased viewpoint of probable causes of suits. This is pertinent to the problem and should be read by all and will be available at the booth of our Official Broker, Faulhaber & Heard, Inc.

It is unfortunate that we of the medical profession who are dedicated to relieve pain, to prevent suffering and death, should be compelled to devote so much time to this problem. However, the problem exists and requires our diligent attention in every part of our daily professional life. Let us never forget from the standpoint of public relations that it is our patients who may be required as jurors to render judgments of our professional acts. To your Committee, public relations is the key to the frequency of malpractice claims in the future.

In conclusion your Committee wishes to express its pleasure for the opportunity of being of service to The Medical Society of New Jersey. As Chairman, I wish to express my deep appreciation to the members of my Committee for their interest, their support and untiring efforts throughout the year. We, in turn, are deeply indebted to the tremendous amount of work performed by our broker, Faulhaber & Heard, Inc., in compiling and maintaining the statistical data essential in the conduct of the work of this Committee. The value of their services cannot be overestimated.

Recommendation

Your Committee desires to recommend the continuation of Faulhaber & Heard, Inc., as our Official Broker.

For action, see pages 20 and 23.

SUPPLEMENTARY REPORT OF SUBCOMMITTEE ON LEGISLATION

C. Byron Blaisdell, M.D., Chairman, Asbury Park
(To Reference Committee "E")

National Legislation

A.M.A.'s position has remained as predicted. Nearly 5,000 bills have been introduced in the House of Representatives and over 800 in the Senate. Many of these overlap or are duplicates. More than 200 with medical interest are being followed by A.M.A.'s Washington Office and no action has been requested of our Society thus far. Our opposition is strong against re-insurance of medical service plans, medical services to military dependents, mortgage guarantees to health facilities. The Administration's progress is making little headway.

State Legislation

About 800 bills or resolutions have been introduced in the Legislature, 281 in the Senate and 541 in the Assembly. Of these, 30 have some medical or health interest. Our Society is actively opposing two, and special bulletins have been issued to keymen and legislators against them. The first, S-90, would admit applicants from Class B or other unacceptable medical schools to examination and medical licensure. The other, A-292, would permit Boards of Education to employ chiropodists. Our position is that foot conditions which might jeopardize the child's health and well-being fall within the province of a fully licensed physician and the employment of a chiropodist is unnecessary.

Nine bills have been reported as approved outright or in principle in the *Membership News Letter*. Disapproved has been a bill which would limit the availability of qualified practical nurses. Another would liberalize the sale of medicinal products or with medicinal properties through feed stores or merchandizing agencies other than drug stores. So far our efforts to support or retard legislation have been satisfactory.

A very successful buffet-supper was held on March 21 which was attended by 106 legislators and doctors. This represents a substantial increase over that of last year.

For action, see page 26.

SUPPLEMENTAL REPORT OF MEDICAL-SURGICAL PLAN OF NEW JERSEY

(To Reference Committee "C")

I. *Apportionment of Available Plan Benefit in a Surgical Case*

The feasibility and method of implementation of the Resolution of the House of Delegates of The Medical Society of New Jersey adopted in May 1954 have been reviewed by the Board of Trustees of the Plan.

Under the terms of the Subscription Contract the services of a surgical assistant are ineligible for Plan payment. The Resolution states in part that "The Fee Schedule as listed by Medical-Surgical Plan for a surgical procedure is an all-inclusive fee, and does not represent solely the fee for the operative procedure alone. Therefore, the committee recommends that the total fee for the procedure be reapportioned, and that a new schedule of fees be established to provide payment for adequate and active pre- and postoperative care and for the technical assistance at the operative procedure itself as well as for the operative procedure."

In order for the Plan to apportion the surgical payment to include the services of a surgical assistant, it is necessary that the services of a surgical assistant be eligible for Plan payment. The Plan, by resolution of the Board of Trustees, can make the services of a surgical assistant who is also an eligible physician eligible for Plan payment. The Board of Trustees has directed that the services of the surgical assistant who is also an eligible physician be eligible as part of the respective payment specified in the Schedule of Payments for the particular surgical procedure.

The Board reviewed the question of pre- and postoperative care. General Provision No. 4 of the Schedule of Payments provides that "the respective payment specified in this Schedule of Payments for a surgical procedure includes the procedure and the pre-operative and postoperative care rendered incident thereto by one or more physicians during the particular hospital admission, and also includes any consultation services in connection therewith rendered by the surgeon who performed the operative procedure."

General Provision No 6 of the Schedule of Payments provides that "If, in a surgical case, necessary medical care (other than pre- and postoperative care incident to the operative procedure) is rendered the person during the particular hospital admission by a physician, the Plan payment for such medical care shall be up to the amount specified therefor in this Schedule of Payments, but not for more than the then unused portion of the total of 21 days of medical care for the Contract Year in which the hospital admission occurred."

The Plan is aware that there are surgical cases which require more than routine pre-operative care (for example: cases complicated by diabetes, heart disease, renal disease, thyroid disease, etc.). The necessary care other than routine pre-operative care in such cases may be rendered by the surgeon or by a physician other than the surgeon.

In order to make appropriate payment for services in such special cases the Board has directed that services of the surgeon rendered during the particular hospital admission more than 3 days prior to the surgical procedure be eligible for payment to the surgeon on a medical care basis of payment and that services of a physician other than the surgeon which are rendered during the particular hospital admission prior to the day of surgery be eligible for Plan payment to such physician (limited to one physician only) on a medical care basis. The medical coverage in such cases is limited to the unused portion of the number of medical days (21) for the Contract Year in which the hospital admission occurred. (Note: There is no change in the current eligibility of the services of a consultant and of medical care for complicating medical disease not incident to the surgical procedure.)

In addition to the above, the Board of Trustees has directed that the following procedure be applicable in a surgical case in order to implement the Resolution:

> "Effective with respect to services rendered on or after May 1, 1955, subject to concurrence by the Banking and Insurance Department, the services of an eligible physician who renders surgical assistance shall be eligible for Plan payment as follows:
>
> > Services of an eligible physician who assists in a surgical procedure with the consent of the operating surgeon shall be eligible for Plan payment. Separate service reports shall be submitted to the Plan by the surgeon and by the surgical assistant and the subscriber will be informed by the Plan of the payments made to each physician. The Board of Trustees is of the opinion that it is in the interest of the Plan to keep the payment for surgical assistance within a range of not less than $10.00 not more than $50.00, depending upon the particular surgical procedure. Such payment to the surgical assistant shall be paid from and shall constitute part of the total maximum Plan payment eligible for the particular surgical procedure. Plan payment to a Participating Physician shall constitute payment in full to the extent provided in the Subscription Contract." (For the information of the House of Delegates there is attached as an exhibit (1) A.M.A. Resolution (2) Principles adopted by the Board of Regents of The American College of Surgeons February 19, 1955).

II. *Proposed New Subscription Contract*

Following a period of exhaustive study of the Plan's experience with its current 1949 Series Subscription Contract, the Board of Trustees has reached certain conclusions regarding the major provisions and substantive changes to be embodied in a new Subscription Contract.

These proposals will be described in detail in this Supplemental Report.

Many important factors have had to be weighed and investigated before final decisions could be taken. To resolve the main questions has necessarily taken considerable time. The balancing of factors is extremely delicate in such an operation as Medical-Surgical Plan, and the Board of Trustees has proceeded with great care to evolve a new Subscription Contract that will represent an increase in benefits — at a Subscription Rate as low as is consistent with sound operation.

The following are the major substantive provisions proposed for the revised Plan Subscription Contract:

(1) *Medical Benefits*: To increase the limit of eligible days of medical (non-surgical) services for a Contract Year from 21 days of such care in hospital per Contract Year (as in the 1949 Series Contract) to 21 days of such care per hospital admission, provided that any subsequent hospital admission occurring within 90 days of previous discharge shall be considered continuous hospitalization.

(2) *Surgical Services in the Out-Patient Department*: Under the present 1949 Series Contract, surgical services rendered in the out-patient department of a hospital without admission of the patient as a bed patient must be surgical services of an emergency nature. It is proposed in the revised Subscription Contract to remove the requirement that such services must be of an emergency nature. The proposed new provision would include surgery in the out-patient department for accidental conditions or for operative surgery of a cutting nature for non-accidental conditions.

(3) *Surgical Services Outside of Hospital*: Under the present 1949 Series Subscription Contract, the only surgical services eligible for payment when rendered outside of hospital are services for removal of tonsils and/or adenoids; and emergency surgical services occasioned by accidental injury, in which case payment is made according to the Schedule up to a maximum of $25.00—such payment relating only to services rendered within 48 hours following the accident. Emergency surgical services rendered in a case of accidental injury beyond the 48 hour period are not eligible for Plan payment. It is proposed in the revised Subscription Contract that the maximum eligible Plan payment for such emergency surgery for accidental conditions outside of hospital shall be increased to $50.00.

It is further proposed to expand the list of eligible surgical procedures of non-accidental nature, when rendered outside of hospital to include (in addition to tonsillectomy and adenoidectomy) surgical services for removal of superficial tumors, cysts, or foreign bodies; incision and drainage of superficial abscess; circumcision; and myringotomy.

(4) *Newborn Infant*: Under the 1949 Series Subscription Contract a newborn infant is eligible for services as an eligible person in his own right only when he attains the age of seven days. It is proposed in the revised Subscription Contract that a newborn infant under the full family contract shall become an eligible person from date of birth rather than after seven days.

(5) *Prenatal Care*: It is proposed in the revised Subscription Contract to continue prenatal care as an eligible service. Plan payment for obstetrical services would include all services for delivery, false labor, prenatal and postnatal care, and care of the normal newborn child or children during the mother's confinement, whether rendered by the attending physician or by another physician.

(6) *Complications of Pregnancy*: It is proposed, under the revised Subscription Contract, to provide payment for complications of pregnancy, such as toxemia of pregnancy, or placenta previa (but not false labor) when rendered in hospital, such payment to be charged to the eligible days of medical care provided by the Contract.

(7) *Consultation Service*: Under the revised Subscription Contract it is proposed to continue consultations as an eligible service. A provision is under consideration that Plan payment may not constitute payment in full to the physician if the consultant services are rendered more than ten miles distant from the consultant's office. Mandatory consultations required by hospital staff regulations will continue to be ineligible for Plan payment.

(8) *Application of Income Limit for Service Benefits*: Under the terms of the existing 1949 Series Subscription Contract, if the income of the subscriber in whose name a given Contract is registered is not more than $5,000 at the time eligible services are rendered a person covered by that Contract, then a Participating Physician is under agreement with the Plan to accept Plan payment as payment in full for such eligible services.

Under the proposed Revised Contract Plan payment to a Participating Physician for services under the Contract would constitute payment in full unless the annual income of either the subscriber or of the spouse, if any, included under the Subscription Contract, was more than $5,000 for the period of the 12 calendar months immediately preceding the month in which the particular services commence for which Plan payment is made.

(9) *Direct Payment to Subscriber*: In the revised Subscription Contract, it is proposed that when services are rendered by a physician who is eligible to be, but is not, a Participating Physician, Plan payment for such services may be made directly to the subscriber following acceptable proof of the rendition of such services.

Similarly, in any case in which the charge for services is made directly or indirectly by a corporation or by a hospital, clinic, or group which includes other than Participating Physicians, or if the charge is made by any person other than a Participating Physician who personally rendered the eligible services, Plan payment may be made directly to the subscriber.

(10) *Schedule of Payments*: It is proposed that the Schedule of Maximum Plan Payments be increased for certain surgical procedures and to restore the maximum payments which were in effect prior to the reduction of Plan payments that were made effective in March 1952, with a maximum restoration of $25.00 for any such procedure.

It should be noted that any proposed change in Subscription Contract will have to be submitted to the Department of Banking and Insurance for its consideration and cannot become effective unless concurred in.

EXHIBIT 1

Resolution, of the A.M.A. House of Delegates, 1954. *Allocation of Total Payment by Blue Shield Plans*

Resolved, That the House of Delegates of the American Medical Association approve the principle that a Blue Shield plan may make separate payments to eligible physicians who render services to an enrolled patient from the maximum scheduled payment available for such services, under the following circumstances: (1) That on certification of the operating surgeon, the scheduled amounts available for services rendered may be paid by the Plan to a physician other than the operating surgeon provided that such other physician has properly rendered such services; (2) That each physician submit his individual report and charges to the plan according to the services rendered the patient; (3) That the plan make separate payment for the services of each physician: and (4) That the plan notify the patient of each payment made by the Plan. Adopted.

EXHIBIT 2

Principles Adopted by the Board of Regents of the American College of Surgeons on February 19, 1955 Governing Participation in Surgical Benefits of Medical Care Plans

1. The welfare of the patient is best served when the operation is performed with the aid of a trained surgical assistant and when the postoperative care is the direct responsibility of the operating surgeon.
2. It is recognized that there are certain areas in the country where these conditions cannot be fulfilled and when the participating of the referring physician may be required either for assistance during the operation or for postoperative care or both. However, the delegation of the surgical aftercare to the refering physician in a hospital where the surgeon is in regular attendance is disapproved.

Proration of Surgical Fees by Medical Care Plans:

1. When it is necessary for more than one physician—excluding interns, residents and regular assistants to participate in the surgical care of a patient (*i.e.*, as assistant or for aftercare) each should submit a report of services rendered to the Medical Care Plans.
2. The amount prorated for surgical assistance and/or for aftercare should be a fixed part of the established surgical benefit. The portions of this benefit to be paid for such services should be established by the proper central authority of the Medical Care Plan and should remain uniform throughout the area served by the Plan.

For action, see page 24.

NOMINATIONS, BOARD OF GOVERNORS MEDICAL SERVICE ADMINISTRATION

(To Reference Committee "C")

The Board of Trustees of The Medical Society of New Jersey recommends the following nominations for membership on the Board of Governors of Medical Service Administration:

Harry N. Comando, M.D.
William F. Costello, M.D.
Arthur W. Lunn
Royal A. Schaaf, M.D.
Rudolph C. Schretzmann, M.D.
Edward W. Sprague, M.D.
John S. Thompson
Thomas J. White, M.D.

For action, see page 24.

NOMINATIONS, BOARD OF TRUSTEES, MEDICAL-SURGICAL PLAN

(To Reference Committee "C")

The Board of Trustees of The Medical Society of New Jersey recommends the following nominations for membership on the Board of Trustees of Medical-Surgical Plan of New Jersey:

Charles W. Barkhorn, M.D.
Irving P. Borsher, M.D.
Harry N. Comando, M.D.
Patrick H. Corrigan, M.D.
William F. Costello, M.D.
Joseph P. Donnelly, M.D.
Joseph I. Echikson, M.D.
Joseph M. Keating, M.D.
Arthur W. Lunn
Paul Mecray, Jr., M.D.
Royal A. Schaaf, M.D.
Rudolph C. Schretzmann, M.D.
Edward W. Sprague, M.D.
John S. Thompson
Thomas J. White, M.D.
Carl K. Withers

For action, see page 24.

RESOLUTION ON APPORTIONMENT OF SURGICAL FEES

(To Reference Committee "C")

The following resolution was adopted by the Mercer County Component Medical Society at its regular meeting on March 9, 1955:

Wheras, The House of Delegates of The Medical Society of New Jersey at its annual meeting in 1954 approved a report of a reference committee recommending apportionment of surgical benefits and fees by the Medical-Surgical Plan of New Jersey.

Whereas, We, of Mercer County, believe this would initiate and promulgate an objectionable type of practice throughout the State of New Jersey.

Therefore Be It Resolved, That the House of Delegates of The Medical Society of New Jersey recommend to the Board of Trustees of Medical-

Surgical Plan of New Jersey the continuance of the present method of payment for surgical procedures, with no apportionment of the surgical fee.

For action, see page 25.

RESOLUTION ON APPORTIONMENT OF SURGICAL FEES

(To Reference Committee "C")

Whereas, The House of Delegates of The Medical Society of New Jersey at its annual meeting in 1954 approved a report of a reference committee recommending apportionment of surgical benefits and fees by the Medical-Surgical Plan of New Jersey.

Whereas, We, of Burlington County, believe this would initiate and promulgate an objectionable type of practice throughout the State of New Jersey.

Therefore Be It Resolved, That the House of Delegates of The Medical Society of New Jersey recommend to the Board of Trustees of Medical-Surgical Plan of New Jersey the continuance of the present method of payment for surgical procedures, with no apportionment of the surgical fee.

For action, see page 25.

RESOLUTION ON STUDENT LOAN FUND

(To Reference Committee on Resolutions and Memorials)

The following resolution from the Woman's Auxiliary to The Medical Society of New Jersey was received by the Board of Trustees at its meeting on April 16th, and is referred to the House of Delegates:

Whereas, Each year the Woman's Auxiliary to The Medical Society of New Jersey raises countless sums of money to aid nursing students, and

Whereas, Each year men have to discontinue their medical studies due to lack of funds, and

Whereas, The Medical Society of New Jersey has always expressed a profound interest in the welfare of its young physicians and medical students, and

Whereas, requests for aid have been received by the Medical Society; therefore be it

Resolved, That The Medical Society of New Jersey be requested to consider the establishment of a student loan fund to assist the individual New Jersey student in meeting expenses incidental to his training in medical school.

For action, see page 29.

AMENDMENT TO CONSTITUTION ELECTION OF BOARD OF TRUSTEES

(To Reference Committee on Constitution and By-Laws)

The following resolution was adopted by the Mercer County Component Medical Society at its regular meeting on February 9, 1955:

Whereas, The present method of election of members of the Board of Trustees of The Medical Society of New Jersey gives many county societies of the state no representation.

Whereas, The approval of the following resolution will give a more equivalent representation to all the county societies of the state, hence giving the Board of Trustees a relationship to the House of Delegates similarly enjoyed by the New Jersey State Senate in its relationship to the Assembly.

Whereas, The Board of Trustees would continue to exert its beneficent modicum of control but more effectively, and would make it possible for each county society to be heard in all important matters of state policy.

Whereas, Since the present board consists of approximately eighteen members, the addition of a few more to its membership will cause no great inconvenience.

Therefore Be It Resolved, That the Constitution and By-Laws of The Medical Society of New Jersey be amended to the effect that the Board of Trustees of The Medical Society of New Jersey be composed of the elected officers of the State Society in addition to one member elected from and by each county society of the state.

Therefore, the following amendment to the Constitution of The Medical Society of New Jersey is hereby recommended:

ARTICLE VI — BOARD OF TRUSTEES

The Board of Trustees shall be the executive body, and shall be composed of the Immediate Past-President, President, President-Elect, two (2) Vice-Presidents, Secretary, and Treasurer (by virute of their offices), and [delete "eleven (11) members—at least two (2) from each judicial district"] twenty-one (21) members, each elected from and by each county society, and who shall each be elected for a term of three years, such term to commence upon expiration of the term of the then incumbent.

From and after May 21, 1953, any members as classified in the first paragraph of this article may be elected a trustee for a maximum of three full terms, provided, however, that if the first two elected terms are successive, there shall be a lapse of one year between expiration of the second and commencement of the third term. The term of any trustee commencing prior to May 21, 1953, shall not be included in the limitation of three elected terms.

For action, see page 34.

AMENDMENT TO BY-LAWS JUDICIAL COUNCIL

(To Reference Committee on Constitution and By-Laws)

An obvious defect in the structure of the judicial mechanism has become apparent; namely, the uselessness of the District Councils. These have never functioned. They seem to constitute an unnecessary complication of the judicial mechanism. The follow-

ing changes in the By-Laws of The Medical Society of New Jersey are offered by the Council to correct this difficulty, with several other clarifying changes.

N.B. *Bracketed elements are to be deleted under the proposed revision; underscored elements are to be added.*

CHAPTER VII—JUDICIAL COUNCIL

Section 1—Election

The Councilors shall be elected as follows: At the first election of officers following the adoption of these By-Laws, two (2) members shall be elected for a period of three (3) years; two (2) members for a period of two (2) years; and one (1) for a period of one (1) year; and as the terms of these elected Councilors expire new elections shall be for periods of three (3) years.

Section 2—Councilors

The Councilors collectively, shall be known as the Judicial Council, and shall constitute the supreme judicial body of the society.

Section 3—Meetings

The Judicial Council shall meet immediately following the election of officers for the purpose of organization. Thereafter, the Judicial Council shall meet as often as may be necessary to transact its business at the call of the chairman. Three members shall constitute a quorum.

Section 4—Duties of the Judicial Council

The duties of the Judicial Council shall be as follows:

(1) To sit as an appellate tribunal and to hear and determine any and all appeals properly brought before it from any County Judicial Committee;

Present (1) to become

(2) To interpret and rule upon all questions of an ethical nature that shall confront the House of Delegates or any other board or committee of the society;

Present (2) to become

(3) To adjudicate all disputes or controversies arising within The Medical Society of New Jersey;

Present (3) to become

(4) To receive complaints or accusations from any source concerning the professional conduct or ethical deportment of members of this society for immediate reference to the appropriate [District Judicial Council, to be established as hereinafter provided and, in general, to expedite the actions of the several District Judicial Councils in the interest of assuring prompt and equitable handling of all such matters brought to the attention of the society] County Judicial Committee;

Present (4) to become

(5) To receive, consider and rule on any matter of discipline concerning any member or members of the society brought to [the Judicial Council] it on appeal from a county Judicial [Council or equivalent body of a county medical society] Committee.

(6) To make and promulgate from time to time such rules and regulations as in its opinion may be necessary to insure the proper functioning of the various County Judicial Committees with reference both to the substance and procedure of hearings had by such County Committees. Upon receipt of such rules and regulations by the various County Judicial Committees, the members of said committees shall be bound thereby.

[Section 5—District Judicial Councils]

[There shall be a District Judicial Council in each Judicial District in the State, to be known as a "District Council." Each District Council shall consist of two members elected by each component county medical society within the district, together with the Judicial Councilor elected by the House of Delegates of The Medical Society of New Jersey to represent the district. Each elected member, except the chairman, shall serve a term of two years, the term of one member representing each county society terminating on May 31 each year. No member shall be eligible to serve simultaneously as a member of a District Council and of a county society Judicial Committee. A quorum of a District Council shall consist of five members, exclusive of the Judicial Councilor and action shall be taken by majority vote of those present.]

[The Judicial Councilor shall serve as the chairman of the District Council in his district. He shall be generally responsible to the Judicial Council for the administration of the affairs of the District Council. He shall render a report at each meeting of the Judicial Council relative to the work of the District Council over which he presides. Such report shall include a record of the disposition of all complaints or other matters referred to or considered by the District Council. He shall have voice but shall not vote in the deliberations of the District Council.]

[Each District Council shall also elect from among its members a secretary, and a vice-chairman who, in the absence of the chairman, shall perform the duties of the chairman.]

Section 6 to become

Section 5—Procedure for Considering Grievances

Any complaint, allegation, or grievance concerning a member of the society, when received by the Judicial Council, shall be referred [to the Judicial Councilor from the district in which the physician complained against maintains membership. Thereafter the Judicial Councilor shall present the matter at the earliest opportunity to the District Council of which he is the chairman.] immediately to the chairman of the County Judicial Committee wherein the dispute or controversy arose, for appropriate action in accordance with the recommended uniform by-laws promulgated by the Judicial Council governing County Judicial Committees. The County Judicial Committees of the various component societies shall have exclusive original jurisdiction over all complaints against a member of any component society or between members of the same or different component societies. In the event that any controversy arises between members of different com-

ponent societies, the matter shall be referred to a joint committee comprised of the members of the County Judicial Committees of the counties involved. A chairman of such joint committee shall be selected at the time appointed for hearing.

[Upon receipt of such a complaint, allegation or grievance, the District Council shall make such investigation as may be required to determine all the relevant facts and circumstances. Such investigation shall be conducted in a strictly confidential manner, and in accordance with rules of procedure to be established by the Judicial Council. The physician concerned will have the right to appear in his own behalf.]

[If, after careful investigation, the District Council finds no cause for recommending disciplinary action against the physician or physicians involved, the case shall be closed and a report of such disposition shall be made to both parties and, through the chairman, to the Judicial Council.]

[If the District Council finds that a complaint, allegation or grievance can be settled by conference and conciliation between or among the parties, or if the District Council determines that the interests of the parties involved will be best served by the rendering of private advice to the physician in question, then the case shall be considered closed and a report of such disposition shall be made to both parties and to the Judicial Council.]

[If, after careful investigation, the District Council finds that there is prima facie evidence warranting disciplinary action, it, in consultation with the society's legal counsel, shall prepare or cause to be prepared a formal written complaint against the accused. The District Council shall then present or refer such complaint to the Judicial Committee of which the accused is a member for appropriate action by such county Judicial Committee.]

If the [District Council] County Judicial Committee or the joint County Judicial Committee shall find after hearing that a complaint, allegation, or grievance involves a matter which, in its opinion, would empower the State Board of Medical Examiners to revoke or suspend [a practitioner's license,] the license of a practitioner, it shall be the duty of [the District Council] such committee forthwith, by written complaint, to refer the [case] findings to the Judicial Council, which shall in turn refer the complaint to the State Board of Medical Examiners.

Section 8 to become

Section 6—Special Procedure for Complaints Involving Fees for Professional Services

In a complaint involving the just and proper amount of a fee for professional services, the [District Council] County Judicial Committee shall first investigate and attempt to effect an amicable settlement. If [the District Council] it shall be unable to reconcile the differences between the parties, then it may determine the fee which it considers just and proper under all the circumstances of the particular case, stating in writing the basis on which the fee has been determined.

If the society member against whom the complaint is brought shall agree to abide by the decision of the [District Council] County Judicial Committee and shall register this agreement with the [patient] complainant in a form to be prescribed for this purpose, then the case shall be considered closed and [only an impersonal statistical] a report shall be rendered by the chairman to the Judicial Council.

If, however, the member should agree to the amount of the fee so fixed but fail to abide by his agreement, then the [District Council] County Judicial Committee may cite such a member for contempt and [so notify the Judicial Committee of his County Society for] take appropriate action thereon.

If a member fails to accept [such a] the determination [in the first instance, such action may, in the discretion of the District Council, constitute grounds for the preferring of formal charges by the District Council to the county society Judicial Committee] of the committee as to a just and proper fee, the committee shall then proceed in accordance with the recommended uniform by-laws hereinabove referred to in Section 5.

Section 10 to become

Section 7—Appeals

Any member of a component county society aggrieved by an action of the county Judicial Committee, or any applicant for membership who has been excluded from membership by a county society, or any lay person aggrieved by an action of the county society Judicial Committee may appeal from the decision or action of the county society or the county Judicial Committee to the Judicial Council.

Decision of the said Judicial Council in any matter so appealed shall be final, except that further appeal may be taken by either party to the Judicial Council of the American Medical Association, if the subject of the dispute falls within the jurisdiction of that Council.

Any appeal to the Judicial Council of The Medical Society of New Jersey must be filed with the Judicial Council within forty-five (45) days of the date of the formal notice to the aggrieved party of the action of the component society or of the county society Judicial Committee.

Form of notice of appeal and procedure in hearing and adjudication of same shall be in accordance with rules of procedure to be established by the Judicial Council, which shall be made available to the parties involved.

Upon filing a notice of appeal, the appellant and the component society or county society Judicial Committee will be required to submit to the Judicial Council all records and papers relative to the matter under appeal. All such papers shall be treated confidentially by the Judicial Council.

The Judicial Council may affirm, modify or reverse, by a majority vote of its members present and voting, the appealed decision. [The Judicial Councilor presiding as chairman of the District Council shall not be eligible to sit on any appeal taken to the Judicial Council as herein provided.]

The Judicial Council may summon witnesses, take new evidence and investigate the appealed matter, in any manner in their opinion required to develop the information necessary for a proper decision.

[Until such time as the Constitution, Article V, shall be amended to remove from the House of Delegates the function of hearing appeals from the decisions of the Judicial Council, such appeals shall be heard and adjudicated by the House of Delegates, rather than by the Judicial Council of the American Medical Association.]

Section 7 to become

Section 8—Administration and Procedure

The administrative and legal costs of the operation of the Judicial Council [and of the District Council] shall be underwritten by The Medical Society of New Jersey in accordance with an annual appropriation for these purposes to be approved by the House of Delegates.

Every matter coming before [a District Council] the Judicial Council shall be considered in a strictly confidential manner. [The] Its records [of the District Council] shall be [maintained under the supervision of the Judicial Councilor for that district, and] subject to inspection exclusively by members of [that] the Council and by legal counsel for the society. Except for purposes of consultation or testimony [as required by the District Council], no member or officer of the society—save legal counsel, the executive officer of The Medical Society of New Jersey, and a stenographer when their presence is deemed advisable by the members of the Council—shall be present at a meeting of [a District Council] the Council when any [complaint] appeal or other matter is under consideration.

In pursuance of its investigatory and judicial functions, the [District Councils] Judicial Council shall have authority to summon members of the Society to appear and testify, either in connection with [a] the complaint involving the member summoned, or as witnesses in cases involving other members. [In case] Should any member fail to respond to such a summons, the [District Council] Judicial Council shall be, and hereby is, authorized to cite such a member to his component society for contempt. Such a citation shall be considered equivalent to a charge of unethical conduct and shall [take the course provided in Section 9] be dealt with by the County Judicial Committee in accordance with the provisions of the recommended uniform By-Laws of said committees herein referred to.

The Judicial Council shall make [and], publish [rules] and [regulations subject to approval of The Medical Society of New Jersey for the conduct of investigations, the disposition of cases, and the formulation of formal complaints by the several District Councils] from time to time, in its discretion, revise and amend rules and regulations relating to procedure before County Judicial Committees and on appeal. Such rules and regulations shall specify periods of notice, procedure for disposition of complaints against physicians who are not members of the society, procedures for notification [of] to complainants and defendants, the nature of the charges advanced, maintenance of proper records, and [other pertinent regulations] such other rules as may be deemed necessary and proper.

[Section 9—Functions of County Judicial Committees]

[Upon receipt of a formal complaint from the District Council, the county society Judicial Committee shall hear and try the matter in accordance with its By-Laws and established rules of order. If the county Judicial Committee shall determine that disciplinary action is warranted against the accused, it shall take such action in accordance with the By-Laws of the county medical society. A report of such action shall be filed with the Judicial Council.]

For action, see page 36.

GENERAL SESSION

Monday Evening, April 18, 1955

The General Session of The Medical Society of New Jersey convened in the Hotel Ambassador, Atlantic City, New Jersey, on Monday evening, April 18, 1955, at 8:45 p.m., Dr. Elton W. Lance, President of the Society, presiding.

President Lance: Ladies and Gentlemen: It is my privilege to welcome you to this General Session of the 189th meeting of The Medical Society of New Jersey. We are privileged tonight to hear the addresses of our incoming President and of our guest speaker, Senator Case.

I recall my experience here of last year with considerable pleasure and I am sure that the same pleasure now awaits Dr. Vincent Butler, whom I now introduce to you as our incoming President for our next year. Dr. Butler. (Applause)

Dr. Butler: It is with a sense of great pride and deep humility that I assume the Presidency of The Medical Society of New Jersey. I come to this office as the 163rd incumbent, truly following a long line of distinguished predecessors. As members of The Medical Society of New Jersey we enjoy a heritage that is not only ancient but eminent. That realization magnifies in me the appreciation of the trust and confidence imposed in me as one worthy to lead and capable of guiding the activities of our beloved society. I find that trust and that confidence an inspiration and a stimulation to give—as God helping me, I will—my best and my all to fulfill well the exactions of this office and to meet the challenges which lie ahead.

Since its founding in 1766, The Medical Society of New Jersey has been faithful to the aims set forth by the fourteen physicians who, on July 23rd of that distant year, met in Duff's Tavern, New Brunswick, and agreed "to form a society for the advancement of the profession and the promotion of the public good." The intervening years have witnessed a pageant of medical progress which, especially in the last half century, has made it possible for the practitioners of medicine to render a type of service that has conferred benefits of health and long life such as had never before been dreamed of, much less enjoyed, by mankind.

The challenges that confront us today and the problems that beset us are not the same as those with which our forebears were called upon to deal. They made their halting way toward the conquest and effective treatment of disease through what to us was a veritable forest of ignorance. In comparison to the treasure of scientifically certified knowledge which is the basis of our procedures today, the practitioners of the eighteenth and even the nineteenth centuries proceeded substantially "by guess and by God." Handicapped as they were by little knowledge and less equipment, they did a remarkably creditable job. And credit was theirs—in generous measure—and appreciation and respect such as we of today, for all our advantages of knowledge and skill, find it hard to equal, much less to surpass. They were, it seems to me, hapless Davids in those days, with splendid courage sallying forth, and attempting to overcome, with utterly inadequate weapons, the appalling might of the Goliaths of disease and death. Their spirits were as gallant as their equipment and their strength were weak. With magnificent valor they faced foes whose very names cast a lingering terror upon us, even in these times when they have lost their power to bring their full and fell strength to bear against us. Bubonic plague, smallpox, cholera, typhus, typhoid, puerperal fever, dysentery, diphtheria, tetanus, yellow fever, malaria, pneumonia, tuberculosis, and a host of other killers were the enemies to which our physician ancestors gave battle. It is the glory of medicine that they fought them so courageously and so consistently.

The chief problems of the members of The Medical Society of New Jersey of early days centered in their need of, and quest for, effective means of arresting disease and of restoring their stricken patients to health and function. Step by step, slowly but surely, that need was gratified, and the effective means were evolved. Individual and organized investigation and scientific research have been responsible for the advances in sound knowledge and reliable technics and treatment that give us today the power, in such large measure, to limit and control the diseases which once freely prevailed. The substantiation of the germ theory of disease and of the cell theory of living things; the invention of the microscope; the development of newer, fuller, and more accurate concepts of chemistry, physics, anatomy, physiology, histology, pathology, bacteriology, parasitology, immunology, and endocrinology; the discovery of roentgen rays, and of the wonders of electrical and radiation

therapy; the advances in anesthesia, surgery, and pharmacology—all have conspired to produce the miracle of modern medicine, which it is our privilege to dispense.

Such is our position today that we need no longer restrict ourselves exclusively to defensive measures against disease, through curative medicine. Instead we can assume the offensive against it, through preventive medicine. Not only can we now restore the sick patient to health, but we can take steps to prevent his becoming ill, by developing immunity and resistance to infections in him, and by discovering disease and morbid conditions in their early stages, before they have the opportunity to become formidable.

Not by chance has all this come about, but by realistically appreciating all the complex factors of the problems involved, and by working intelligently to solve them. Credit for the victory belongs to sound organization, through which knowledge has been won and unrestrictedly shared, with subsequent improvement of the competences of all qualified medical personnel, and advantages to all the people. Thus has been fulfilled the dedicated dream of our founding fathers, "to form a society for the advancement of the profession and the promotion of the public good."

In the light of all this, it is evident that the things that worried our colleagues of other days do not remain so sharply to harry us today. But other considerations—if not equally serious, certainly equally challenging—demand our attention and our efforts. They are predominantly socio-economic in their character. They arise out of the circumstance that the benefits which modern medicine is able to bestow are almost as costly as they are desirable. If all our people are to enjoy these benefits, then the expenses entailed in supplying them must be met.

Ideally in a country such as ours, whose citizens are free and independent, each able citizen would by his own efforts provide for his own needs and for the needs of others who are his dependents. The needs of those who through unfortunate circumstances are unable to provide for themselves would, ideally, be taken care of by agencies of government, one of whose accepted functions is to provide for the individual such services as he needs and is entitled to and cannot provide for himself. In normal circumstances and in normal times, it would be no great problem, out of the abundance of the independent many, to provide for the needs of the dependent few. But these are not normal circumstances and normal times, as the anguished condition of affairs the world over makes manifest. So weighty are the tax burdens which all our citizens bear, so great the costs of daily living, that relatively few of our citizens have at their disposal and under their control sufficient funds to defray all of their own expenses, much less to provide for the needs of others. In the matter of medical care, most find it hard to provide for any except the less serious illnesses. Serious and protracted sickness, involving and utilizing all the modern, complex modalities and agencies of diagnosis and treatment, falls upon the average citizen with the impact of catastrophe—physical and financial. As a protection against this impact, voluntary health insurance has been developed, with its roots in New Jersey, to supply for the average citizen a safeguard against the costs of "castastrophic illness." It has proved immensely helpful and immensely popular. In organized medicine we have made every effort to achieve its acceptance and to help make it satisfactory. Our present desire is to bring voluntary health insurance to such a satisfactory status that it will be generally recognized as adequate and will become the chosen instrument in the United States for providing protection against the costs of modern, efficient, comprehensive medical care. Before that goal can be realized the protection which it affords must be so expanded as to cover embracingly all the major costs of medical care and treatment; and this must be done within the limits of premiums that the average citizen can honestly afford to pay.

The economic problems of the citizens of our country are not directly the concern of Medicine, but of government and of the citizens themselves. However, if the advantages of modern medicine are to be available to all our people—and only in proportion as they are, can medicine do its proper job — then some way must be found to pay for those advantages . . . some way that is not coercive or restrictive of the free and efficient practice of medicine, and, at the same time, that does not imperil the self-respect or economic security of the citizen, or add unduly to the financial burdens and instability of the government.

Admittedly, this is a complicated and most difficult problem, one that in some respects makes it seem that our predecessors were fortunate in having to come to grips only with disease and death. But it should not prove an insoluble problem. It is one to which we must give ourselves wholeheartedly, more as citizens than as doctors . . . as citizens who are determined to preserve the best character for our government and for ourselves, and to retain all the advantages that properly belong

to those who can claim as their own the greatest and most enlightened country in the world.

In the battle to conquer disease and in the effort to extend the span of healthful life, we doctors have won our victories as the result of the prevalence of a spirit of unselfish and devoted cooperation, on the part of our colleagues within the profession and on the part of the general public. United in that same spirit, we shall not fail to achieve satisfactory solutions of the problems that remain before us. In that realization, let us enter upon this year, prepared to give, and asking to receive, understanding and assistance, in order that, in the midst of world confusion and the uncertainty of governments, we, the people of the United States, may make clear beyond all doubt that order, security, and peace are fully and happily attainable by those who live with respect and love for one another, inspired by the fear and love of God.

(Audience rose and applauded.)

PRESIDENT LANCE: Thank you, Dr. Butler. That was a moving and inspiring talk. And now, we turn to our next item. The guest speaker and I have certain things in common. We live in the same town; we occasionally go to the same church; some of the things that I enjoy, he enjoys. I see in him many things that other people occasionally have said that they couldn't see at all.

I don't think there is any reason to hide the fact that Senator Case has been a controversial figure in our political history, at least over the past few months. I had enough confidence in the fact that he might be elected when he was nominated for the position of Senator, to invite him to be my guest speaker at this meeting. There were a few hours in which I thought maybe I might have to look for some one else. (Laughter) But my judgment was vindicated.

I don't know what the Senator is going to say, but whatever it is certainly the medical profession of New Jersey ought to be interested in it because I know from my contacts with him over the years, which are quite a number now, that he is interested not only in things that medicine has to offer, but is a part of many things which everybody that works together for the good of this country is a part of.

It is now my very great privilege and pleasure to introduce to you the Honorable Clifford P. Case, United States Senator from New Jersey. Senator Case.

(Audience rose and applauded.)

SENATOR CLIFFORD P. CASE: Dr. Lance, Dr. Butler, Ladies and Gentlemen: Dr. Lance and I indeed have had many relationships, but the closest of all he hasn't mentioned. He is our family doctor and has been for a quarter of a century or more. You wouldn't recognize that he had been able to be a family doctor for that long, just by looking at him. (Laughter) But he has been, and our relationships with each other and our families with each other have been very close and warm. And if he made a mistake a year ago and it bears fruit tonight, you must forgive him because a man who has so many things in his favor can be forgiven one mistake, I'm sure. (Laughter)

It is a great privilege for me to be here and a very great pleasure. As Dr. Lance said, there was a time when it wasn't altogether certain that I would be here tonight. The period of uncertainty lasted for me longer than it appears to have lasted for him. He spoke about a few minutes. I remember a few months. (Laughter) It seemed quite endless. But they did end—and here I am and there you are. (Laughter) But not for so very long.

Dr. Butler and I had an agreement that each of us would keep to a very brief period the time that we detained the audience tonight. He has fulfilled his obligation in that respect, as well as in giving all of us a very pungent and worthwhile message. I understand the nature of the obligation on both parts. I'm sure I will be able to fulfill mine.

When I was a candidate for a good many months, there was a story that I used to tell which illustrates that point. It was about a man who had committed a murder down South. He was caught, tried, convicted and sentenced to be hanged, and as he stood on the scaffold and before they dropped the black cap over his head, the sheriff said to him: "You know that under the law you have five minutes in which you may address this audience on any subject that you want to talk about."

The man hesitated just for a moment and said: "Yes, Sheriff, I understand my rights, but I have no use for the time."

Then a man from the audience got up and said: "Sheriff, if this man doesn't want his five minutes, may I have them to speak on behalf of my candidacy for the United States Senate?" (Laughter)

The Sheriff was taken aback and said: "A most unusual request, but I suppose if the condemned man has no objection, you may have the time."

He turned to the man on the scaffold, who again with only a moment's hesitation said: "No, Sheriff, I have no objection at all, but let's get the hanging over with first and then let him have his time." (Laughter)

Among other things that I lack, I'm sure I lack this, called by H. J. Balfour the highest quality of a successful politician -- the con-

tempt of the bore for the bored. Really I understand the obligation of a person on this side of the table to people sitting where you are.

One other little story involves a man who used to come to a place called Seaview, a golf club here near Atlantic City, to play golf on week-ends. He was a Democrat, but a very good fellow. His name was Al Smith. (Laughter) He came down week-ends quite often with a party of friends from New York. On Saturday night they would play cards and Sunday they would play golf. Some of them were Catholics and some were Protestants. Al Smith and his Catholic friends had to get up on Sunday morning and go to church before they played golf. The others should have, but did not do so.

One morning after a particularly late Saturday night, Al, having gotten up with a good deal of difficulty and shaved and showered, was tip-toeing with one of his Catholic friends through the bedroom of a Prostestant friend who lay sleeping there, and Al turned to his friend and, looking down, said: "Wouldn't it be awful if they were right and we were wrong?" (Laughter) Without any irreverence whatever.

I do want to suggest that in this country, by and large, we are reverent and it is that I want to make the subject of my very brief remarks to you tonight.

It is not necessary that what I have to say be said to members of the Medical Society as to some other branches of your profession because as Dr. Butler's talk tonight clearly indicated, you have been in the forefront in recognizing the period in which we live, the obligations that fall upon people with responsibilities such as yours—a recognition that takes full account of your age-honored obligation to attend the sick and the ill and beyond that to lead socially in the community. It involves an awareness of the fact that society doesn't exist and perpetuate itself in decency and order automatically; that there are great questions and have always been great questions as to whether it was possible for people to live together in freedom and in order.

Our western civilization in the modern sense goes back perhaps a quarter of a millenium to what is called the Enlightenment — a period in which men burst the shackles of fanatacism and ignorance and hatred that had come down through the Middle Ages and took a new lease on life and all over the civilized world this flowering and rejuvenation became effective.

One of the products was our revolution and another was the French revolution, and at the time and to outward appearance to many people these seemed very much alike and in some respects, indeed, they were. Both were the product of the Enlightenment; both were the product of the revolt against fanatacism, revolt against feudalism and the chains that bound men. But there was this difference: the French revolution, while it had high-sounding slogans, enthroned the Goddess of Reason. It proclaimed the overthrowing of the old order, but it proclaimed it with fanatacism itself. It had no interest in the individual. Everything was the Cause and Society.

Our revolution was based also, as well as upon the Enlightenment, upon the deep religious heritage of this country and of our forebears. And this difference between the French revolution and ours was basic. Because of our deep religious heritage, to us the individual was the most important thing in the world and his freedom was the most important thing in the world. No cause, no ism was important enough to justify destruction of the individual or his mal-treatment.

But to those who guided the French revolution the cause was the important thing and the individual didn't matter, and it was because of this that we believed and still believe that the individual is, himself, a part of the Divine and therefore must not be violated. And to those of the French revolution and who followed, and the Russian experiment is the logical fruition of that line of thought. The individual is nothing, and society is everything.

Obviously mankind was not made perfect and obviously it is difficult for men with their weaknesses, which you know so well —and I am reminded of the words of Balzac who said the doctors and lawyers and priests all wore black because they were in mourning for the sins of the world. Truly you do see the bad side of men and to some doctors this is the only side—I'm sure not to New Jersey doctors. But man is not himself perfect and there are problems about organizing society in which imperfect people must try to get along without cutting each other's throats, and these things aren't easy. And I would venture to say that except on this ground of our religious heritage and the belief in individuals being a part of the Divine, on secular grounds alone the Soviets may have the best of it when they believe that it is proper and right to destroy the individual in order to make a society which is a smooth running operation. I'm perfectly convinced that this is so. So we have this difference between that line of thought and ours, and those who attempt to make the difference between us appear solely one of economics are so wrong, because the difference is basic and fundamental.

Now, I happen to be quite conservative in the sense that I like to think is the right kind of conservatism. I don't believe myself in violent change. I don't believe in revolution; I believe in evolution. I do believe the due process requires that change be slow, at a pace which people are able to absorb without being too much upset, but I do believe the change is necessary. I do believe that we must meet new conditions. I do believe that there is no limit on what we can perform for ourselves and for the other person. I do believe in free enterprise, but I don't enshrine it as a religion. I don't believe in laissez faire economics. At one time the doctrine served a most useful purpose in bursting the chains that shackled industry, but the idea that industry left completely to itself can operate and will operate automatically at the highest level seems to me perfect nonsense. And that's another good thing about this country; we are willing to take a reasonable chance in experimentation, and because we are, and because we are not tethered to a doctrine or a dogma, because we are not fanatics, we have been able to weather every change until this country now has had democracy in action for the longest period of any nation on the face of the earth.

This is not an accident. We have been lucky in many respects. Our natural resources, the great wealth that we have, the climate, the energy of the people, the various strains melted here to become one of the strongest and most active and virile people in the world — all these have helped, but somehow or other this tradition of being willing to change when change is necessary, I believe, coupled with a recognition that restraint also is necessary and that the individual in the process must not be destroyed—all these things taken together are the reason that we are what we are today—the only country with real strength in which liberty is secure.

And it is these things that make it for me the most exciting thing in the world to be in politics, because politics is the art of making it possible for people to get along together. And anyone knows how difficult that is; how in the closest association within one's own family, where every tie of affection and love make toward happiness, it is difficult sometimes to accomplish. And how much more difficult in a community, in a state or in a country this is. And what a miracle it is that in this great land of ours, composed of the most diverse peoples ethically, socially, economically and all the rest, we have been able to accomplish this thing. It is because of these combined beliefs of ours in the importance of the sacredness of the individual, our willingness to meet changed condition with bold though moderately paced experimental processes that we have accomplished what we are today, and are still just in our infancy.

And so it is especially a satisfaction for me to come before this Society of New Jersey, which represents in its best sense in your profession everything that I have been talking about, to make the kind of public confession of my faith and broad philosophy completely in accord with your own.

Thank you so much for asking me.

My very best wishes to you, Dr. Butler, in your administration of the affairs of this great Society next year.

And to all of you, as you go out again into the workaday world, thank you so much.
(Applause)

PRESIDENT LANCE: Ladies and gentlemen, this concludes this evening's program. I might say that I have waited perhaps for this opportunity twenty-five years; you have waited several months. To me, this has been a very wonderful presentation, and I thank you for being here.

(The meeting concluded at 9:25 p.m.)

DINNER - DANCE

Tuesday Evening, April 19, 1955

The speakers' section of the dinner-dance program convened at 8:55 p.m., Dr. Edward G. Bourns, Toastmaster.

DR. BOURNS: Good evening. I bid you all welcome to this dinner in honor of Dr. and Mrs. Lance, and I bring you welcome from The Medical Society of New Jersey and the Union County Medical Society in claque here assembled.

This evening's occasion is a very luscious one and I think that it is quite important that we start it off at the proper pitch. Dr. Lance, with some foresight, has seen fit not to have any after-dinner speakers this evening. He apparently has heard that old gag that if all the after-dinner speakers were laid end to end it would be a good thing. (Laughter)

A more recent corollary of that is, if all the people who have to listen to after-dinner speakers were seated six feet apart, they'd have more room in which to stretch. (Laughter)

I had a rather unusual experience coming down this evening. I was coming through the hall and ran into Henry Decker. He was standing against the wall outside of the elevator and he was going up and down like this, and he looked terrible. He was pale and he was perspiring, he was shaking and trembling and I thought for a minute he had just gotten out of a Hudson County caucus (laughter), but it turned out that he had just come down the elevator (laughter), and it seems that he had had a little trouble getting there. You know how the girls do—they get you down about six inches below the floor and then back up again and down again. And I said: "Henry, what's the trouble?" Well, he told me what had been going on. He said finally when he got to the place where the girl stopped the elevator about one foot below the level of the floor he said to her: "Sister, just leave it there and I'll jump for it." (Laughter)

As is usual on an occasion like this we have a number of congratulatory telegrams which have been sent in to Dr. Lance on the occasion of this meeting. I just want to take the trouble to read to you one of them though. This is from the Department of Internal Revenue (laughter) and it says: "Dear Dr. Lance: When do you resume practice again?" (Laughter) It says: "Also beg to inform Dr. Butler he cannot deduct television set as office expense. Commissioner says watching 'Medic' does not constitute post-graduate medical education." (Laughter)

Dr. Lance falls in that category of people who lately have been unable to get home very often. As you know, he has a couple of boys and he has some grandchildren, and not long ago Ruth was sitting there at night and one of the grandchildren came to her crying and said: "Nanny." She said: "What's the trouble?" The little fellow said: "You know that fellow that sleeps here at nights—he just beat me." (Laughter)

One of the problems involved in this sort of a job is that we have a number of distinguished guests and it always is a problem to divide them into categories, but we have divided them into standees and talkees. We have a number of standees that I would like to present to you at this time.

I would like first to present one of Dr. Lance's sons and his wife, Dr. and Mrs. Kendrick Lance. Dr. and Mrs. Lance, will you stand, please? (Applause)

Dr. Lance is a graduate of Harvard Medical School, which reminds me of a story about some fellows who were going up to Harvard for the Yale game. They were on a train going out of New York City. They were sitting, doing a little drinking but nobody was talking, no one was mixing very much.

Finally one of the fellows stood up, and he was a very well dressed fellow—had a gray flannel suit, a conservative Homburg and all that sort of stuff, and he says: "I'm J. Richard Boddington, Harvard Class of '05." He says: "I'm in the banking and insurance business. I live on the North Shore of Manhattan, married and I have three children. They are going to Harvard, of course—all boys." Well, he sat down.

Another man rose and said: "I'm Brocton Bromton. I'm with the Chase National Bank, New York City. I live near Forest Hills. I belong to the Forest Hills Cricket Club; Harvard Class of '04." He says: "I have three boys. They are all going to Harvard."

There was a slight pause and then a fellow got up in an old turtle neck sweater, sort of slouchy hat on, dungarees, and he stood there for a minute. He says: "My name is Jack Brown. I'm from Yale. I don't have any job and I'm not married; however, I have one boy —Harvard, of course." (Laughter)

Dr. Lance has invited some other friends

down here, among them Mr. and Mrs. Edward Johnson of Rahway. Mr. Johnson, I understand, is a rag-picker of sorts, which reminds me of a story about a rattlesnake out west, which came home crying to its mother, and the mother says: "What's the trouble dear?" And she said: "I was just over to Mary Rattlesnake's place and her mother kicked me outside; said I couldn't play with her; I wasn't good enough." Her mother says: "Don't you cry, dear. I knew her mother when she didn't have a pit to hiss in." (Laughter and applause)

Mr. Johnson is actually one of Dr. Lance's evil fishing companions, but I would like to have him and his wife stand at this time, if they will, please. Mr. and Mrs. Johnson. (Applause)

Masquerading at Dr. Lance's little party last night was a gentleman who has been going under various assumptions as he has passed through the environs of the Medical Society at this meeting. He came down here as a guest. Dr. Decker took him down and passed him around as an expert on nuclear fission. He has been variously characterized as a chiropractor; he has also been assigned the title of comptometrist. His name is actually Bob Jones. He is really Dr. Lance's butler. (Laughter) I would like to have Mr. and Mrs. Bob Jones stand up, if they will, please. (Applause)

If you have ever seen Ruth Lance scooting about the state in her immaculately polished Maxwell (laughter) and wondering how she manages to do it with those long finger nails looking like red lacquered sugar scoops and trailing a long cigarette holder, and so forth, it's done largely through the influence of the secretarial staff which Dr. Lance maintains in his office. Such efficiency is responsible only from one person—Mrs. John Dixon, Dr. Lance's Secretary. I would like to have her stand, please, and take a bow. Mrs. Dixon. (Applause)

We have some distinguished out-of-state delegates with us here tonight. I would like to introduce at this time Dr. J. Stanley Kenney of New York. Dr. Kenney. (Applause)

We have also with us Dr. and Mrs. John Carr. Dr. Carr is the Secretary of the New Jersey Dental Association. Dr. and Mrs. Carr. (Applause)

We also have the President of the New Jersey State Bar Association. I wonder if you know the story about the lawyer, minister and the doctor who were on a boat which had been shipwrecked and they were approaching an island. It seemed apparent that the current would take them away from the island unless some one got ashore with a rope. And the question came as to who would have the obligation.

Well, it seemed that the lawyer was the only one that could swim, so he volunteered to take the rope and jump over and swim towards the shore. This he did with great finesse until suddenly across the surface of the water appeared a dark fin cutting the surface of the water and a shark approached him and seemed about to engulf him.

The minister cried: "Let us pray. Let us pray." And the doctor said: "Let's watch and see what happens." And the shark came right up to him, took a dive, passed under him and went on. And the minister said: "Now, that's an act of God." And the doctor said: "No, that's professional courtesy." (Laughter and applause)

I would like to introduce Mr. and Mrs. Foster Freeman. Mr. Freeman is President of the New Jersey State Bar Association. Mr. and Mrs. Freeman. (Applause)

We also have some very delightful members at the head table here—some of which are standees and some of which are talkees. I am going to introduce the standees to you now. You will meet the talkees later on.

On my left, at the other end of the table, is Dr. Ruoff. Dr. Ruoff is a well known physician in this state in industrial medicine. Dr. Ruoff. (Applause)

I have a confession to make at this time. Sitting next to Dr. Ruoff is my wife Frances. This happens to be her birthday and I must now confess to her that up until now I have been misleading her. I have told her that this is a party in honor of her, and she has believed that. (Laughter) Now I have to assure her that it is not.

My wife is the suspicious type of character you often see among doctors' wives. Whenever she sees a group of doctors together, with their arms around each other, she thinks they are telling stories. (Laughter) After the session we had for Dr. Lance the other day, she said to me: "What is Elton doing down there with Dr. Satulsky and Dr. Murray and Dr. Newbury with their arms around each other? Telling stories?" And I said: "No. We were discussing some scientific facts." She said: "Like what?" And I said: "Well, Dr. Satulsky was telling a story about a pregnant pigeon; it seemed it was just a lark." (Laughter) But there is always that type of suspicious woman around.

However, this is my wife's birthday and I told her that I hope we enjoy the next hundred years as much as we have the past. My wife. (Applause)

And next the very gracious wife of our President—Ruth Lance. (Applause)

I would like to introduce at this time some

one whom most of you have already met in some capacity before; that is Dr. Vincent Butler, the President-elect of the State Medical Society. (Applause) Dr. Butler is actually the President of the Medical Society since this afternoon.

Next I would like to introduce Dr. Rauschenbach. Dr. Rauschenbach is a gynecologist from the northern end of New Jersey. Dr. Rauschenbach. (Applause)

And I now introduce Mrs. Butler, the wife of the President of The Medical Society of New Jersey. Mrs. Butler. (Applause)

I would also like to introduce Mrs. Andrew Ruoff, the President-Elect of the Woman's Auxiliary. Mrs. Ruoff. (Applause)

At this time it is my pleasure to present to you Mrs. Paul E. Rauschenbach, President of the Woman's Auxiliary to The Medical Society of New Jersey. Mrs. Rauschenbach. (Applause)

MRS. PAUL E. RAUSCHENBACH: Thank you very much, Dr. Bourns.

It is indeed a great pleasure to welcome you to this dinner honoring the Immediate Past-President of The Medical Society of New Jersey, Dr. Elton W. Lance, and to bring you the greetings of the Woman's Auxiliary to The Medical Society of New Jersey. For Dr. Lance and for me, this marks the end of a brief, incomparably rewarding year. With every ending, however, there is a beginning. I would like to feel that the beginning in this instance was that of a unified effort on the part of the Medical Society and the Auxiliary to welcome more members to our Auxiliary.

Fifteen years ago many physicians did not encourage their wives to join the Auxiliary, feeling that we were little better than "do-gooders." This was acceptable to many women, for as yet they were content to sit at home and knit. Industry, research and the resultant marvelous machines have reduced the elbow tax and shortened the number of hours needed to do the adequate housekeeping chores.

Also to be considered inestimable is the greater number of doctors' wives with several years of professional experience, who feel the need of mental stimulation or of friends to meet in the afternoon for social reasons. To this group is joined the wife of the young medical student who helps support the home during the financial struggle that plagues the young doctor as he is being trained and establishing his office. These young women, too, need an outside interest and relaxation as they plan their hours when husbands are on service or studying.

Several organizations reap the benefits of the group I have mentioned. Some have become leaders in the PTA, Federated Women's Clubs, and countless other lay organizations. Also in their ever-increasing numbers are found the ones who carry medicine's story to the millions of homes in America for the American Medical Association and our own State Medical Society.

Tonight I would plead for help in selling our Auxiliary, your Auxiliary, to those women as yet unaffiliated with our organization, but veritable reservoirs of good will, intelligence, and humanity—your wives. Our work in New Jersey, and in America, is not over. We are still facing organizations such as the chiropractors. Take notice of the growing strength of *their* auxiliaries. The Dental Society, too, is forming auxiliaries. They recognize their value, I am certain. I plead for us to recognize the importance of our own.

Dr. Frank S. Forte, President of the Essex County Medical Society, and I were discussing recently the wide variance between the Medical Society and the Auxiliary membership. Certainly the difference in the figures does not indicate that great number of bachelors in our midst. At this time Dr. Forte suggested the feasibility of creating some status of Auxiliary membership, such as an inactive member, into which category each physician's wife would go automatically when her husband joins the Medical Society.

This would give us a greater combined membership. Legislators who are now aware that we exercise our franchise, that we are interested in local government, that in increasing numbers we are assuming leadership in community activity, certainly would welcome your suggestions on matters of medical interest, as, guided by Hippocrates, you seek the Aristotelian Golden Mean.

In closing, may I quote a few lines from Longfellow:

"They rise or fall together
As unto the cord—the bow is,
So is man unto woman.
Though she bends him, she obeys him
Though she leads him, still she follows
Useless each without the other."

(Applause)

DR. BOURNS: Thank you very much, Mrs. Rauschenbach.

I hope all you fellows who heard about that lead-and-follow business, lower your heads and you will believe it.

The next part of this program gives me an inevitable pleasure, I may say. It isn't often that one in my particular capacity finds himself in the position that I am in. I refer to

the fact that I do some anesthesia and I happen to do it for the person for whom this party is given tonight—Dr. Lance.

Now, for a person in my capacity to get up here and spend this time completely eulogizing an individual for whom he does anesthesia, I think most of you will concede is quite a problem, particularly when that individual has spent a great deal of time saying to you: "Bourns, get your damn thumb out of the way." (Laughter) That is his favorite phrase to me during tonsil anesthesia. So I think that I have a little cause for digressing just a few moments here to talk about Dr. Lance and perhaps put before you a few facts with which you may not be familiar about him.

You know, he's quite a golfer. Golf is a game in which you take a ball slightly over an inch in diameter; you put it on one that is eight thousand miles in diameter. You try to hit the little one and miss the big one.

Dr. Lance was out playing golf not too long ago with some friends of his and they were going down a fairway paralleled by a road. Just as this friend was about to drive off, along comes a funeral procession. This friend paused. He took his hat off and he held it over his heart. He stood there in great modesty until the entire funeral procession had passed. And then he drove his ball off down the fairway, and the other fellows drove off, and they walked down in sort of silence and contemplation.

Dr. Lance spoke to him and said: "You know, I was deeply impressed. Bill, with the fact that you exhibited the courtesy you did when that funeral procession came along." And Bill said: "Well, I have a great respect for that deceased person." He said: "We would have been married thirty years next Tuesday." (Laughter)

It's remarkable what you can see when you read the papers. I brought this along this evening for the purpose of showing to you friends some of the things that take place out in the country. This is a copy of the Elizabeth *Daily Journal,* one of our esteemed Union County papers. It is dated Saturday evening, April 16, and it's got a number of very interesting articles and features on the front page. You see a picture of some anglers doing some trout fishing and it says: "Anglers flock to Rahway River for opening of trout season." Well, all trout that are put in the Rahway River are called drinking trout. As soon as they put them in, the boys say bottoms up and they turn over on their bellies and die and then the fellows net them out at the other end.

Now, if you turn to Page 2 of this paper you will see an article which is entitled: "New Jersey Medical Unit to Hail Lance." On the left of it is another article that says: "McGrath Rejects Bookies Plea." And on the right it says: "Peterson Advises the Best on Berries." So between the bookies and the berries is this article about Dr. Lance. It tells about him being born in Vermont and about his medical education and so forth; then it comes down to one of those things that is very important—the sort of thing that we took up this morning in our House of Delegates' session when we passed that business about annual registration. I want you to listen here.

It says: "He received his doctorate in medicine from the University of Vermont in 1924." And then it goes on down in the next paragraph it says: "A member of the attending staff of Rahway Memorial Hospital since 182[illegible]." (Laughter) That's the sort of stuff we've got to watch, fellows. There's a guy been practicing all these years, no license, no nothing, practicing medicine.

It reminds me of that story about the old guy who got a divorce. He was 99 years old. And the judge told him, when he granted him the divorce, he says: "Now, Joe," he says, with a twinkle in his eye, "you know you can't get married again for another six months." The old fellow says: "Well, I know, Judge, but that don't keep me from browsing around a bit, does it?" (Laughter)

Elton is full of very pithy aphorisms. One of his favorite ones is: I'll be teetotal rammed up a sink spout. I don't know what that means, but that is one he uses on me on occasions.

Another one of his favorites is that between the pathologist and the anesthetist the surgeon's life is not a happy one. Well, perhaps the surgeon's lot isn't. Since the new hospital accreditation board has come in, all the pathologists have to find polymorphonuclears around the appendices they took out—the thing that he was calling a chronic remunerative inconsequential ulna. (Laughter) A fine thing to introduce in the Medical-Surgical Plan. It is like the whale who fell in love with a herring, and one day the herring disappeared. He came back, but shortly thereafter the whale disappeared. Well, this was a little bit mystifying in the fish world. A bass swimming around came up to the herring and said: "Hey, what's happened to your boy friend, the whale?" And the herring says: "How should I know? Am I supposed to be his"—wait until I get this one straight. (Laughter) I'll get it; give me time. He says. "I'm not expected to be my brother's kipper, am I?" (Laughter)

I wouldn't assign that title to Dr. Henry Decker, our Immediate Past-President, but I

do want to present to you at this time Dr. Decker, the Immediate Past-President of The Medical Society of New Jersey. Dr. Decker. (Applause)

Dr. Henry B. Decker: The Junior Senator from New Jersey last night remarked that Dr. Lance was his family physician. Dr. Lance is also my family physician because he takes care of my grandchildren, and when one has escaped the lesser disaster of life which is dying too young and hopes to avoid the greater disaster, which is living too long, grandchildren become the most important things in the world.

It is my function to present Dr. Lance with the amulet which this Society gives. He will not need a Mandarin to interpret it, nor is it like the amulet that, in Kipling's poem of Fisher's Boarding House, the mate withdrew this charm, which did not keep her man from harm.

New Jersey is an interesting state. To one who has lived in it and whose ancestors have lived in it since Colonial times, it has a particular charm that no other state in the Union has—it has a high tradition of medical practice. There is no place in the world where there is a higher tradition of service and practice. This is exemplified in The Medical Society of New Jersey, which is an old Society, It is older than the State.

An individual who reaches the post of President of the Medical Society, when he has finished his service is admitted into the Fellowship of the Society. He becomes a Fellow with certain rights and privileges that stay with him throughout the rest of his life.

We do not have many Fellows living. We have a number who have passed on during the past 189 years, but I am going to call the role of the living Fellows and ask the ones who are here to stand. Dr. Harrold A. Murray, Dr. Sigurd Johnsen, Dr. Aldrich Crowe, Dr. J. Howard Hornberger, Dr. Royal A. Schaaf, Dr. Ralph K. Hollinshed, Dr. Watson B. Morris, Dr. E. Zeh Hawkes, Dr. William G. Herrman, Dr. Spencer T. Snedecor, Dr. Marcus W. Newcomb, Dr. Lancelot Ely, Dr. Frederic J. Quigley, Dr. George "New Jersey" Sommer. (Applause)

Gentlemen, I present to you Dr. Elton Lance, who is worthy of Fellowship in The Medical Society of New Jersey. Dr. Sommer, who is the Senior Fellow, is bringing up the key that bears witness to this Fellowship.

(The audience arose and applauded as Dr. Sommer presented the Fellow's Key to Dr. Lance.)

President Lance: Dr. Sommer, Dr. Decker, Honored Guests and Friends: Being admitted into the Fellowship of the men who have been Presidents of The Medical Society of New Jersey is one of the greatest honors that any doctor in the State can have.

It would have made me happy had the honor been given to me by Dr. Decker. I think it is a greater honor to have Dr. Decker ask Dr. Sommer to make this presentation, and I appreciate it very deeply.

During this year and during this meeting I have worn out my larynx to some extent making pronouncements, giving certain speeches and so forth, but I would like to say that no man does a job like this alone. I have had the fine cooperation of a very fine group of men, presidential officers and Trustees. I have had the wholehearted support of those who have served on committees and who have been doing various jobs for the Society. I have also had the feeling that behind me were the members of the county in which I live, giving me support and encouraging me.

At this time, ladies and gentlemen, I would appreciate it very much and I would like for the rest of the State to see the men and women who live in my county, and I wonder if the people who are here from Union County will rise for a moment because I do appreciate your presence and your cooperation. (Applause) Thank you very much, indeed.

Now, ladies and gentlemen, this isn't the time for speeches, but I do think that this key represents something that any man would certainly be proud to own. I thank you all from the bottom of my heart. And I am going to turn this back now to our Toastmaster, Dr. Bourns. Thank you. (Applause)

Dr. Bourns: Thank you very much, Dr. Lance.

On every program there comes an occasion about which a toastmaster might like to wax eloquent, but circumstances often forbid it. I just want to tell the members of the Essex County Medical Society that those of them who are selling tickets on the black market for a program to be presented in the Urological Section will find themselves thwarted.

I am quoting now from the official program of The Medical Society of New Jersey. Under the Section on Urology at 11:15 tomorrow morning will be a paper delivered by an Essex County man, entitled "Permanent Diversion of the Urinary Stream (Illustrated)." (Laughter) That is a title of such fascinating proportions that I am afraid we should have let the matter rest there. (Laughter)

I hope you enjoyed yourselves. I am going to turn the evening over to Mr. Joseph Stern. I want to thank the management for the very nice dinner we have been served, and the orchestra for the very nice music. (Applause)

(The speakers' portion was then concluded at 9:45 p.m. and entertainment and dancing followed.)

TRANSACTIONS OF
THE WOMAN'S AUXILIARY
TO
THE MEDICAL SOCIETY OF NEW JERSEY
Twenty-eighth Annual Meeting

The twenty-eighth annual meeting of the Woman's Auxiliary to The Medical Society of New Jersey was declared in session by the President, Mrs. Paul E. Rauschenbach, on Tuesday, April 19,1955, at 9:00 a.m., in the Surf Room, Ambassador Hotel, Atlantic City.

The invocation was given by the Rev. Jackson A. Martin of St. Mark's Church, Pleasantville.

The pledge of loyalty was repeated by all present.

Mrs. Harry Subin, Convention Chairman, moved the acceptance of the convention program as planned. Motion was seconded by Mrs. Morris Joelson and carried.

Mrs. George Turner, President, Woman's Auxiliary to the American Medical Association, was then introduced. The roll was called by the Recording Secretary, Mrs. D. Leo Haggerty.

Mrs. David B. Allman, Parliamentarian, read the convention rules and moved their adoption. Motion was seconded by Mrs. J. Howard Hornberger and carried.

Mrs. Max Gross, President of the Woman's Auxiliary to the Medical Society of Atlantic County, gave the speech of welcome. Response was made by Mrs. Andrew C. Ruoff, Sr., President-elect of the State Auxiliary.

The Credentials Chairman, Mrs. Samuel L. Winn, reported that 220 women had registered.

In the absence of Mrs. Richard J. McDonald, the Memorial Service for departed members was conducted by Mrs. Don A. Epler, Fellowette.

Mrs. Thomas DeCecio, Treasurer, gave her report, which showed a balance of $4,180.20. Mrs. Haggerty read the report of the auditor, Mr. Willard Roberts, of Trenton. It was moved by Mrs. Epler, seconded by Mrs. Asher Yaguda, and carried, that the reports of the treasurer and auditor be accepted for filing.

Upon motion by Mrs. Paul Aszody, seconded by Mrs. Ben Berner, and unanimously carried, the minutes of the 27th annual meeting were accepted as printed.

Mrs. Bertram J. L. Sauerbrunn, First Vice-President, took the chair for the reading of the president's report. It was moved by Mrs. A. Guy Campo, seconded by Mrs. Yaguda, and carried, that the president's report be accepted with thanks.

Mrs. Rauschenbach named Mrs. Epler and Mrs. Kenneth E. Corson timekeepers, to allow two minutes for reports.

The following state committee reports were given:

Annual Report Review—Mrs. Don A. Epler
Archives—Mrs. William E. Dodd
Bulletin—Mrs. A. Guy Campo
Chronically Ill—Mrs. Clarence B. Whims
Conference—Mrs. Andrew C. Ruoff, Sr.
Finance—Mrs. Robert B. Walker
Historian—Mrs. Kenneth E. Corson
"Hub"—Mrs. Paul Aszody
Legislation—Mrs. Edward H. Dyer
Medical Education Fund—Mrs. Oswald R. Carlander
Medical History—Mrs. Samuel H. Jessurun
Mental Health—Mrs. John C. Voss
News-Note—Mrs. Floyd D. Gindhart
Nurse Recruitment—Mrs. Ben Berner
Organization and Membership—Mrs. Bertram J. L. Sauerbrunn
Parliamentarian—Mrs. David B. Allman
Public Relations—Mrs. Sydney G. Fine
Safety—Mrs. Millard Cryder
Today's Health—Mrs. Asher Yaguda

The following County Presidents' reports were given:

Atlantic—Mrs. Max Gross
Bergen—Mrs. Gustav G. Steneck
Burlington—Mrs. Edward T. Cicione
Camden—Mrs. Ralph K. Bush
Cape May—Mrs. Carl J. Records
Essex—Mrs. Philip R. D'Ambola
Gloucester—Mrs. Francis H. Weiss
Hudson—Mrs. Moses Dolganos
Hunterdon—Mrs. Samuel Felder
Mercer—Mrs. George A. Corio
Middlesex—Mrs. George Scheibal
Monmouth—Mrs. John R. Ayres, Jr.
Ocean—Mrs. Gorman Jaffe
Passaic—Mrs. Morris S. Joelson
Salem—Mrs. Isadore Lipkin
Union—Mrs. Roy T. Forsberg

A collection was made for the Crusade for Freedom.

Mrs. Rauschenbach then introduced Dr. Earl Wood, who spoke on the "Society for the Relief of Widows and Orphans."

Under the heading of new business, Mrs. Hornberger and Mrs. Haggerty presented the proposed revisions to the Constitution and By-Laws. (See page 65). On motion these were approved as amended, the amended portion reading as follows:

Chapter VIII—County Auxiliaries, Section 2

(a) Wives of members in good standing of a county medical society, or whose husbands at the time of their decease were in good standing, shall be eligible to active membership in a County Auxiliary.

(b) Mothers, unmarried daughters, and unmarried sisters of members in good standing of a county medical society, or who at the time of their decease were in good standing, shall be eligible to associate membership in a County Auxiliary.

Mrs. Rauschenbach introduced Mrs. Gerald A. Beatty, President, Woman's Auxiliary to the Medical Society of Delaware.

Following luncheon, the general session was called to order by Mrs. Paul E. Rauschenbach.

Mrs. Hornberger read the proposed revisions to the Constitution and By-Laws of the Woman's Auxiliary to the American Medical Association.

Mrs. Allman, Parliamentarian, read the rules of election of a nominating committee. Mrs. Rauschenbach called for nominations for the nominating committee. The following were duly elected:

Mrs. Paul E. Rauschenbach, Chairman, Passaic County; Mrs. Edward H. Dyer, Atlantic County, Mrs. Louis Wegryn, Union County; Mrs. Harry DiGiacomo, Essex County; and Mrs. Chester I. Ulmer, Gloucester County.

Mrs. Frank S. Forte presented the following report of the Nominating Committee:

President—Mrs. Andrew C. Ruoff, Sr.; President-elect—Mrs. Bertram J. L. Sauerbrunn; First Vice-President—Mrs. John C. Voss; Second Vice-President—Mrs. A. Guy Campo; Recording Secretary—Mrs. D. Leo Haggerty; Treasurer—Mrs. Thomas DeCecio; Directors—Mrs. John J. Torppey and Mrs. John J. Muccia.

Unexpired term of Mrs. John C. Voss to be filled by Mrs. Gorman Jaffe, Ocean County.

On motion by Mrs. Epler, seconded by Mrs. Glazier, and unanimously carried, the nominating ballot became the elected ballot.

Upon motion by Mrs. Glazier, seconded by Mrs. Campo, and carried, the following resolution was adopted:

Whereas, The material in the *Bulletin* of the Woman's Auxiliary to the American Medical Association is selected by the Publication Committee with the idea of giving to the members of the Woman's Auxiliary information and suggestions that will be of interest and help to them in their Auxiliary work; and

Whereas, The *Bulletin* of the Woman's Auxiliary to the American Medical Association is the only means of communication available to the National Board for disseminating pertinent current information to the total membership between annual meetings; and

Whereas, Every working member should subscribe to and read the *Bulletin* to keep informed and up-to-date on Woman's Auxiliary and A.M.A. affairs; therefore be it

Resolved, That a letter be sent to the president of each organized county urging revision of said county's by-laws to include a subscription to the *Bulletin* in the yearly dues.

Upon motion by Mrs. Glazier, seconded by Mrs. Stuart Z. Hawkes, and unanimously carried, the following courtesy resolutions were adopted:

Thanks To Our President

Whereas, Our President, Mrs. Paul E. Rauschenbach, has served the Woman's Auxiliary to the Medical Society well; and

Whereas, Her genial manner and devotion to her duties has promoted a most cordial relationship among the members; therefore be it

Resolved, That the Woman's Auxiliary to The Medical Society at its Twenty-eighth Annual Meeting, express to our retiring President. Mrs. Paul E. Rauschenbach, the grateful thanks of the members.

Appreciation to Dr. Elton W. Lance

Whereas, Dr. Elton W. Lance, President of the Medical Society, has advised and assisted the Woman's Auxiliary, and

Whereas, His friendliness has encouraged every officer and member who has had the privilege of knowing him, therefore be it

Resolved, That the Woman's Auxiliary to The Medical Society of New Jersey at its Twenty-eighth Annual Meeting express to Dr. Elton W. Lance, the sincere appreciation of the Woman's Auxiliary.

Thanks to Dr. Lewis C. Fritts

Whereas, Dr. Lewis C. Fritts, Advisor to the Woman's Auxiliary, has given unstintingly of his time and efforts in promoting the plans and programs of the Auxiliary, therefore be it

Resolved, That the Woman's Auxiliary at its Twenth-eighth Annual Meeting, express its thanks and sincere appreciation for these courtesies to Dr. Lewis C. Fritts, Advisor to the Woman's Auxiliary to The Medical Society of New Jersey.

Thanks To Mrs. Edith Madden

Whereas, The Woman's Auxiliary to the Medical Society is deeply grateful to Mrs. Edith Madden,

Medical Society Administrative Secretary, for the many services rendered during the past year; and

Whereas, She has given so much of her time and effort to smoothing out the mechanical details of the administration of our Woman's Auxiliary to the Medical Society; therefore be it

Resolved, That the Woman's Auxiliary to The Medical Society of New Jersey at its Twenty-eighth Annual Meeting, express sincere appreciation and our many thanks.

Appreciation to Mrs. Subin and Her Committee

Whereas, Mrs. Subin and her Committee have worked so diligently on behalf of the Woman's Auxiliary to The Medical Society of New Jersey and

Whereas, Mrs. Subin and her Committee, always having the best interests of the Auxiliary members in mind, have planned so efficiently as to our enjoyment and comfort, therefore be it

Resolved, That the Woman's Auxiliary at Twenty-eighth Annual Meeting; express sincere appreciation and heartfelt thanks to Mrs. Subin and her Committee for their untiring efforts on behalf of the Auxiliary.

Appreciation to Miss Carmela Lorenzo

Whereas, Miss Lorenzo has done yeoman service in compiling our records and has always been ready to help officers and chairmen when the need arose, therefore be it

Resolved, That the Woman's Auxiliary to The Medical Society of New Jersey, express sincere appreciation and thanks to Miss Lorenzo at its Twenty-eighth Annual Meeting.

Recognition To Hotel Ambassador

Whereas, The Woman's Auxiliary to The Medical Society of New Jersey in convention assembled April 1955, wish to convey to the Management and Staff of the Ambassador, their cognizance of the many courtesies extended, therefore be it

Resolved, That the Woman's Auxiliary express thanks and appreciation to all those who have extended these courtesies and helped to make this convention a memorable one.

Mrs. Winn, Credentials Chairman, reported a final registration count of 285.

Mrs. Rauschenbach appointed a reading committee for the minutes of the annual session. They are as follows: Mrs. Bush, Mrs. D'Ambola, and Mrs. Yaguda.

Mrs. Walker conducted the ceremony of the Installation of Officers. Mrs. Rauschenbach, retiring president, turned the gavel over to Mrs. Andrew C. Ruoff, Sr., who accepted it with a short speech of acceptance.

The 28th Annual Session of the Woman's Auxiliary to The Medical Society of New Jersey was declared adjourned.

PROPOSED REVISIONS TO THE CONSTITUTION AND BY-LAWS

Constitution: Article IV

Section 1, line 1: Divide Article IV into Sections a.) and b.) After b.) insert the following words: "Past State Presidents of the Woman's Auxiliary not Committee chairmen shall be considered members of the Executive Board with all privileges except the right to vote."

Strike out Article IV, Section 2.

By-Laws: I.

Elections, Section 1: Strike out Section (a) and insert the following words: "(a) The Nominating Committee shall consist of five members. The Chairman shall be the retiring President. One member of the Executive Board and three from the members present shall be elected at the Annual Meeting."

Subdivision (f) line 2: After the word "meeting" place a period and strike out the remainder of the subdivision.

Section 3, line 2: After the word "years" insert the word "each." Strike out the remainder of Section 3 and insert the following words: "Two shall be elected each year. Those who qualify for directors must have served on the Executive Board of the State Auxiliary."

By-Laws II

Duties of Officers, Section 1, paragraph 2, lines 8 and 9: After the word "Auxiliary" place a period and strike out the words: "the amount to be voted by the Board."

Section 2, line 2: Strike out the word "ranking" and insert the word "first."

By-Laws IV

Executive Board, Section 1, line 1: Strike out the words "The management and control" and insert the words "The business."

Line 3: Strike out the words "vested in" and insert the words "conducted by."

Combine Sections 2 and 3.

After the words "Annual Meeting" insert the following sentence: "Other meetings shall be held on the second Monday in October, January, and March."

Strike out all of Section 3.

If there is no objection, the renumbering will be done in the Revision by the Secretary.

By-Laws Chapter VI

Committee: If there is no objection, Section 1 will be added by the Secretary.

If there are no objections, the Secretary will change the subhead to "Archives and History" rather than "History and Archives."

Paragraph 3: Strike out the words: "Art, Hobby and" before the words "Medical History."

Strike out the words "encourage members to display arts and hobbies at the State Convention."

If there are no objections the Secretary will arrange the Committees in alphabetical order.

Under the heading "Finance" line 3: Strike out the words "approve all bills" and insert the words "sign vouchers."

Under the heading "Today's Health": If there are no objections, the Secretary will place this paragraph in correct alphabetical order.

Subhead "Widows and Orphans," line 2: If there is no objection, the Secretary wil repla e small letter "w" with a capital "W" in the words "Widows."

By-Laws. Chapter VII

Delegates to the American Medical Association Auxiliary, line 1: Strike out the word "preceding" and the word "open."

Line 5: Strike out the word "selected" and insert the word "nominated."

Line 7: Strike out the words "in the delegation."

By-Laws. Chapter VIII

County Auxiliaries, Section 2: Strike out paragraph 1 and replace with the following; "Wives of members in good standing or whose husbands at the time of their decease were in good standing shall be eligible to membership in a County Auxiliary."

By-Laws. Chapter IX

Parliamentary Authority: If there is no objection the Secretary will change this to Chapter X.

Insert the following paragraph: "The Woman's Auxiliary to The Medical Society of New Jersey shall not affiliate with other organizations, nor provide for representation on its Executive Board of representatives of other organizations, nor be itself officially represented on the boards of other organizations except with the approval of the Medical Advisory Board of The Medical Society of New Jersey." (This insert appeared formerly on pages 4 and 5 under Article IV, Section 2.)

By-Laws. Chapter XI

Chapter XI—Amendments: If there is no objection the Secretary will change the Chapter Number of this paragraph.

THE JOURNAL

OF

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The MEDICAL SOCIETY OF NEW JERSEY has officially selected the plan of our Company for Accident and Health Insurance and the policy is available to Society members in accordance with the Company's rules and regulations for acceptance of risks.

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Sickness Benefits —Full monthly benefit for total disability, commencing with EIGHTH DAY of disability, limit 24 months, house confinement not required.

Arbitration Clause —The Committee on Medical Defense and Insurance of The Medical Society of New Jersey are the SOLE arbiters in the event of any claim disagreement between Company and policyholder.

Cancellation Clause —Cancellation Clause, Standard Provision No. 16, not included in policy. The Company reserves the right to decline to renew on the following grounds only:

A. Non-payment of premium.
B. If the insured retires or ceases to be actively engaged in the medical profession.
C. If the insured ceases to be an active member of The Medical Society of New Jersey.
D. If renewal is refused on all policies issued to all members of the Society, in which event 60 days prior notice in writing must be given.

PREMIUM RATES

(Applicable to ages at entry and attained at annual renewal of insurance)
Ages shown below signify next birthday.

Monthly Benefits	Dismemberment Benefits	ANNUAL RATES* Ages up to 50	Ages 51 to 60	Ages 61 to 65**
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200.00	10,000	57.70	66.70	84.70
300.00	15,000	85.90	99.40	126.40
400.00	20,000	114.10	132.10	168.10
500.00	20,000	141.30	163.80	208.80
600.00	20,000	168.50	195.50	249.50

* Premiums may be paid half-yearly or quarterly, pro-rata.

* All rates above INCLUDE $1000 Accidental Death Benefit. Additional Accidental Death Benefit up to $4000 (making a total of $5000) may be procured for an additional annual premium of $1.30 per $1000.
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** Although the age limit for acceptance of risks is the 65th birthday, once issued there is no termination age limit for renewal and the rates of the last age group remain stationary.

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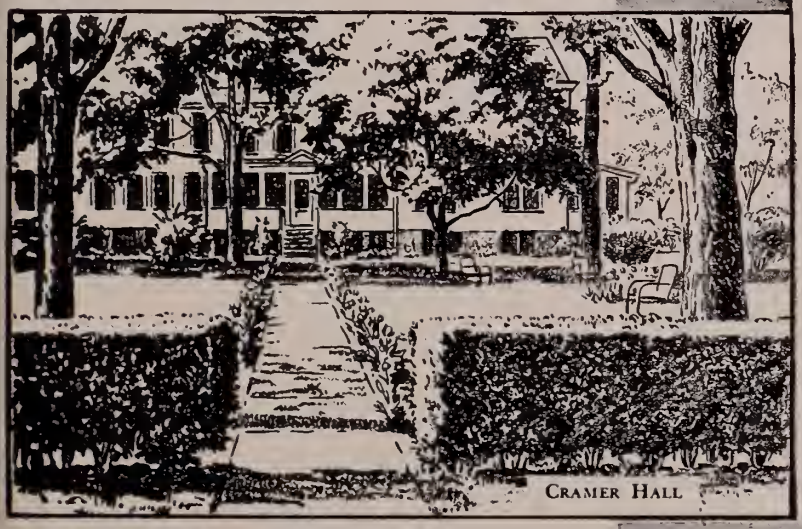

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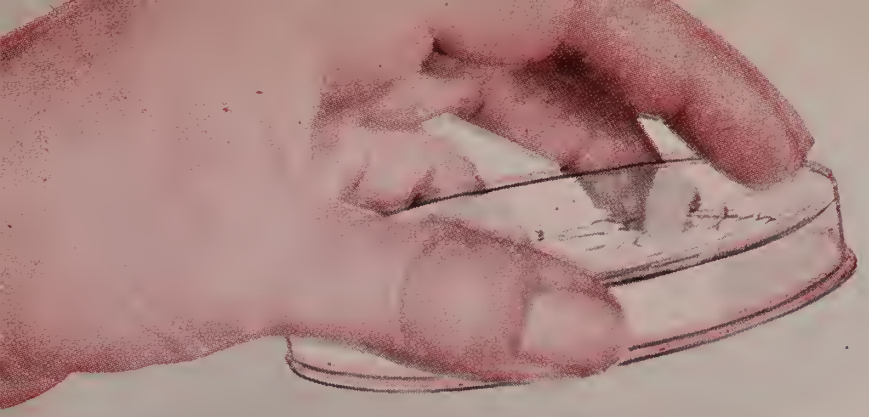

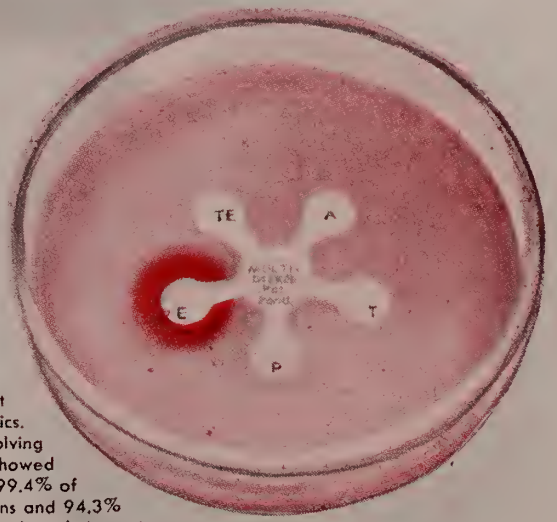

DESTROYS ENTEROCOCCI

This blood agar plate shows a strain of beta hemolytic enterococcus. Note extreme sensitivity of this organism to ERYTHROCIN—yet it easily resists the other antibiotics. Additional data: A study[1] involving 202 enteracoccic strains showed sensitivity to erythromycin in 99.4% of *alpha* hemolytic strains and 94.3% of beta hemolytic strains.

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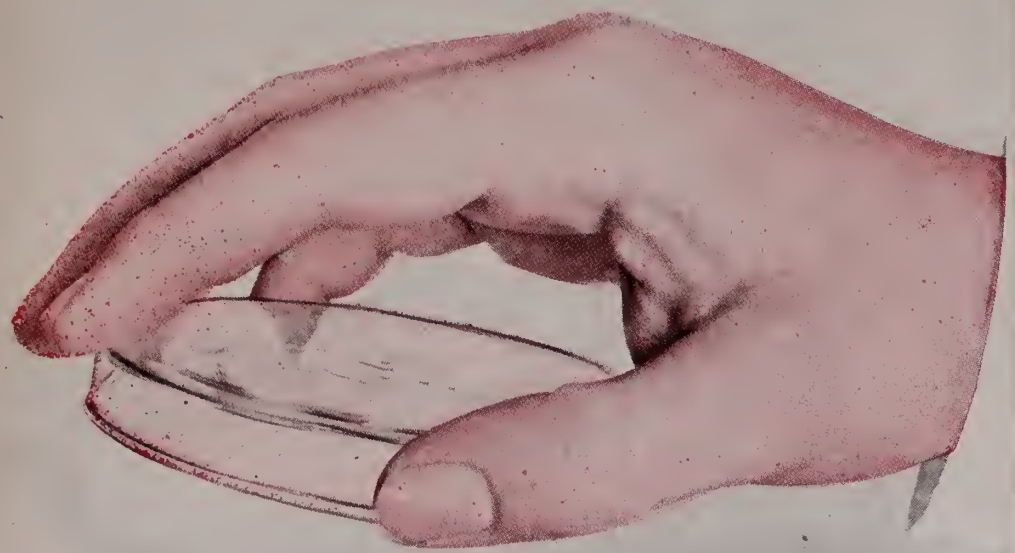

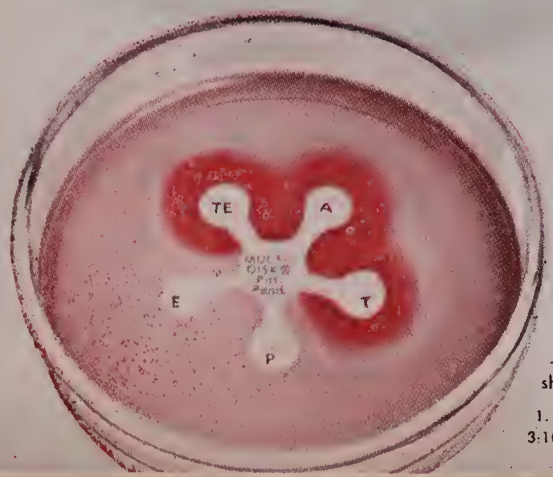

SPARES

INTESTINAL FLORA

This sensitivity test shows ERYTHROCIN and the same antibiotics against a typical intestinal strain of *E. coli*. Note that ERYTHROCIN and penicillin do not affect this gram-negative organism —although the other antibiotics show marked inhibitory action.

1. Eisenberg, et al., Antib. & Chemo., 3:1026-1028, Oct., 1953.

with little risk of serious side effects

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1. Lehr, David: Antibiotics & Chemotherapy, 3:71, 1953.
2. Everett, H. S. and Long, J. H.: Am. J. Obs. & Gyn. 67:916, 1954.

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1. Winsor, T., and Humphreys, P.: Angiology *3*:1 (Feb.) 1952. 2. Plotz, M.: New York State J. Med. *52*:2012 (Aug. 15) 1952. 3. Dailheu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.

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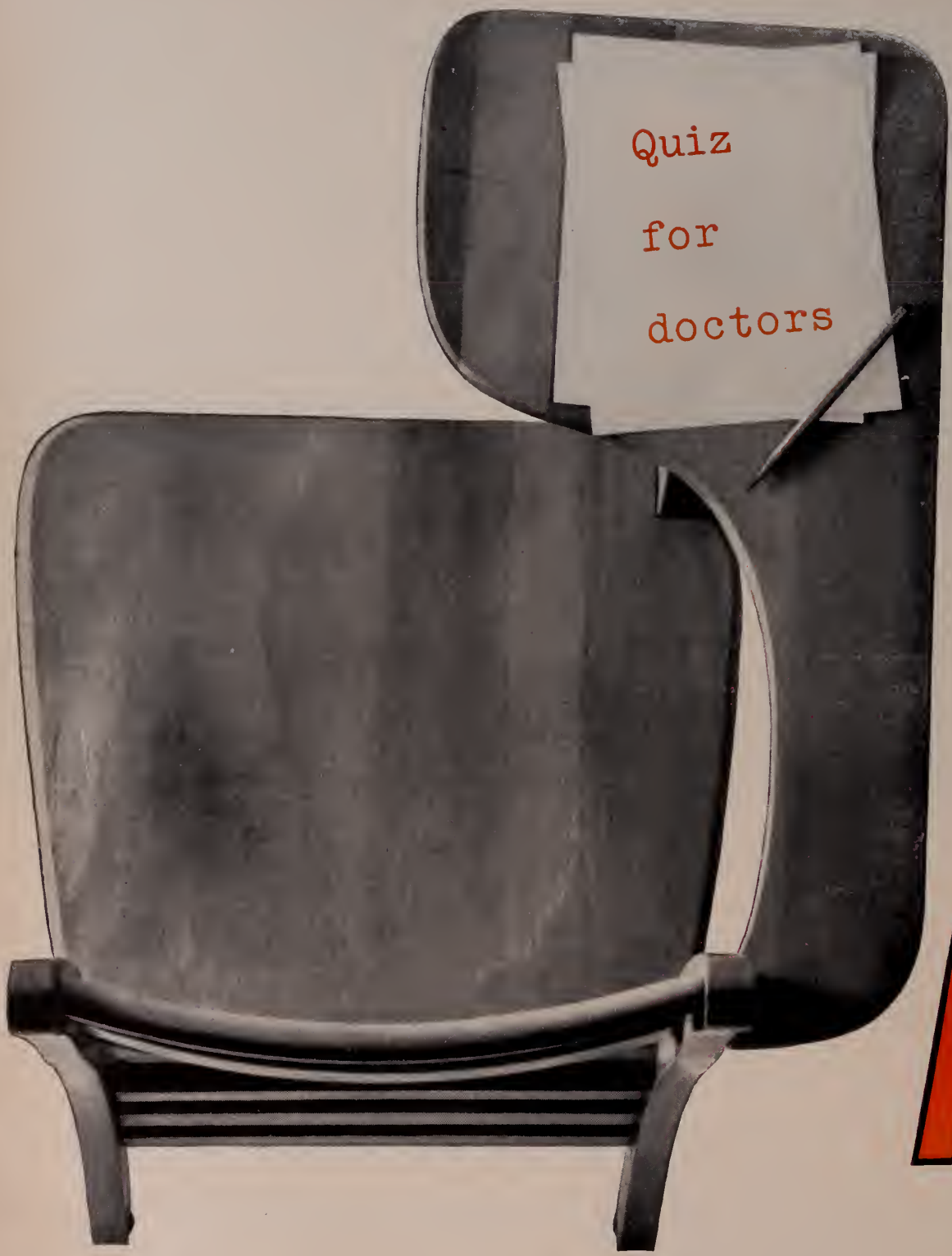

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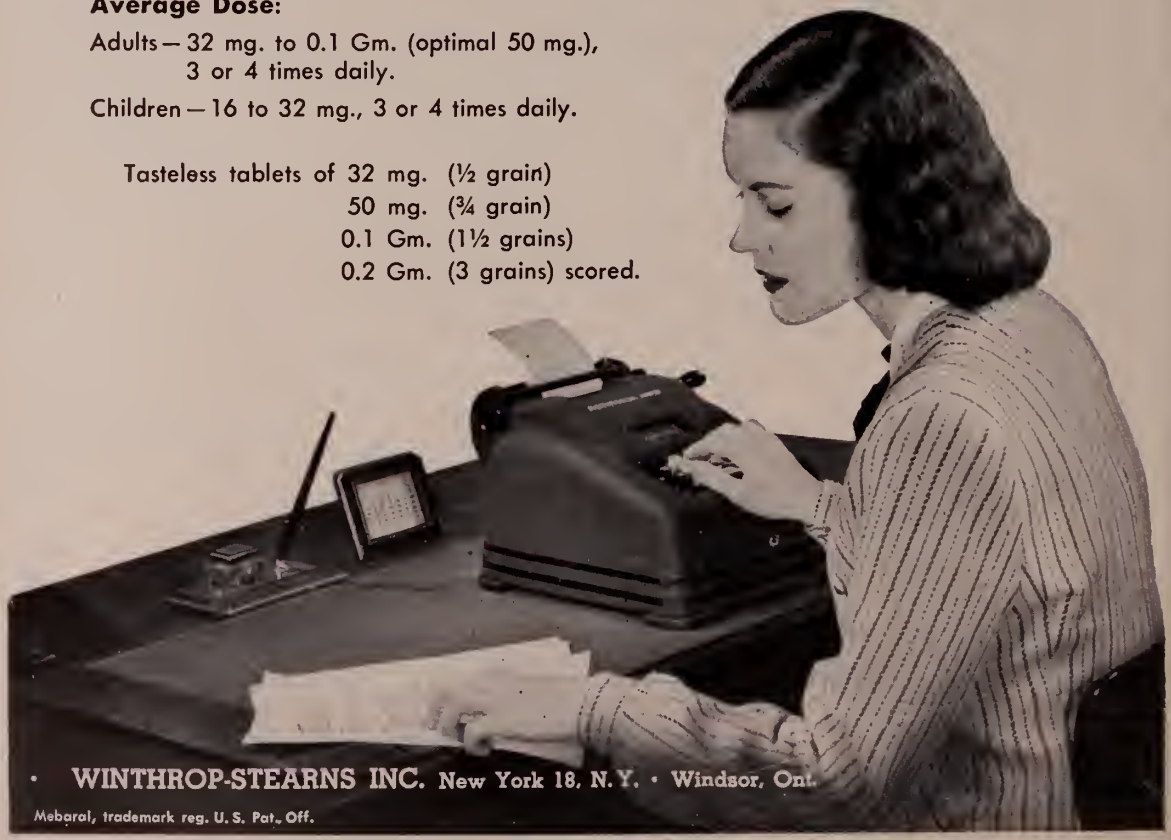

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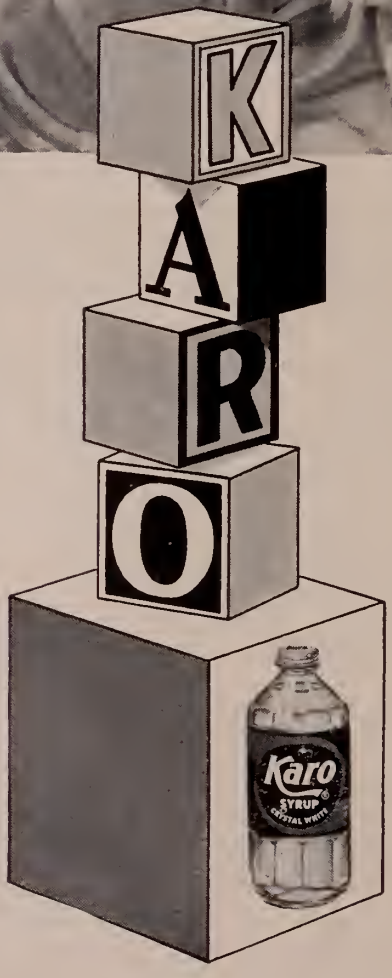

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1. Selling, L.S.: J.A.M.A. 157: 1594 (April 30) 1955. 2. Borrus, J.C.: J.A.M.A. 157: 1596 (April 30) 1955.

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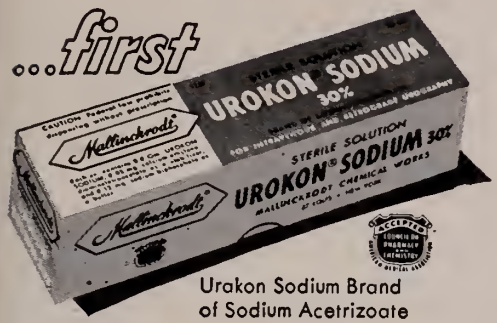

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[1]Nesbit, R. M. and Lapides, J.: J. Urol. *63:* 1109 (1950).
[2]Richardson, J. F. and Rose, D. K.: J. Urol. *63:* 1113 (1950).
[3]Nesbit, R. M. and Nesbitt, T. E.: U. Mich. Med. Bull. *18:* 225 (1952).
[4]Zinc, O. C.: (Private report dated May 12, 1952).

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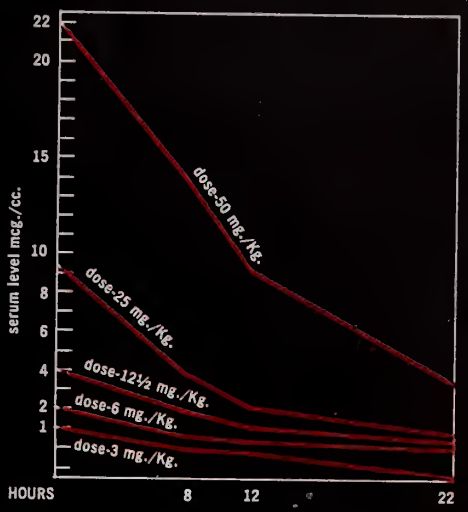

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O'Regan, C., and Schwarzer, S.: J. Pediat. 44:172 (Feb.) 1954.

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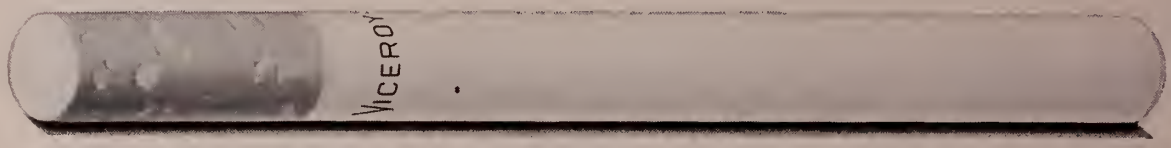

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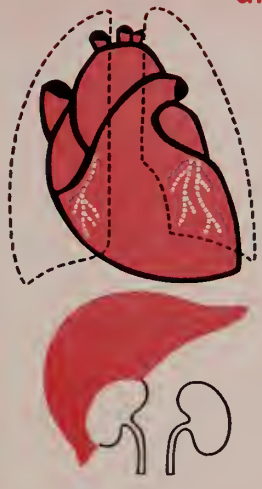

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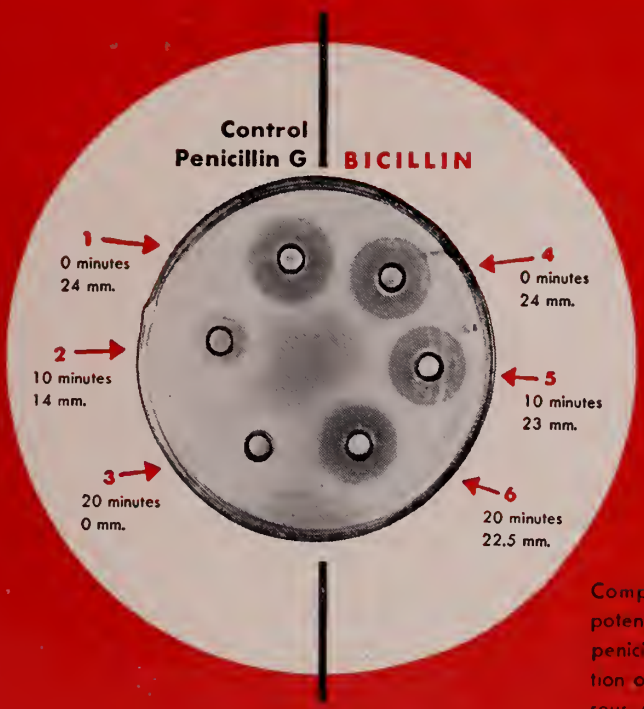

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1. American Medical Association: New and Nonofficial Remedies. J. B Lippincott Co., Philadelphia, 1954, p. 147

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Dowling, H. F.: Practitioner *174*:611 (May) 1955.

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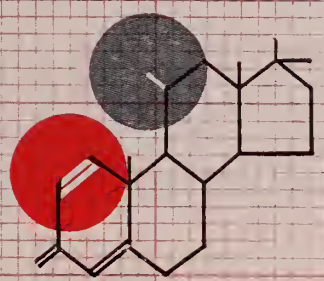

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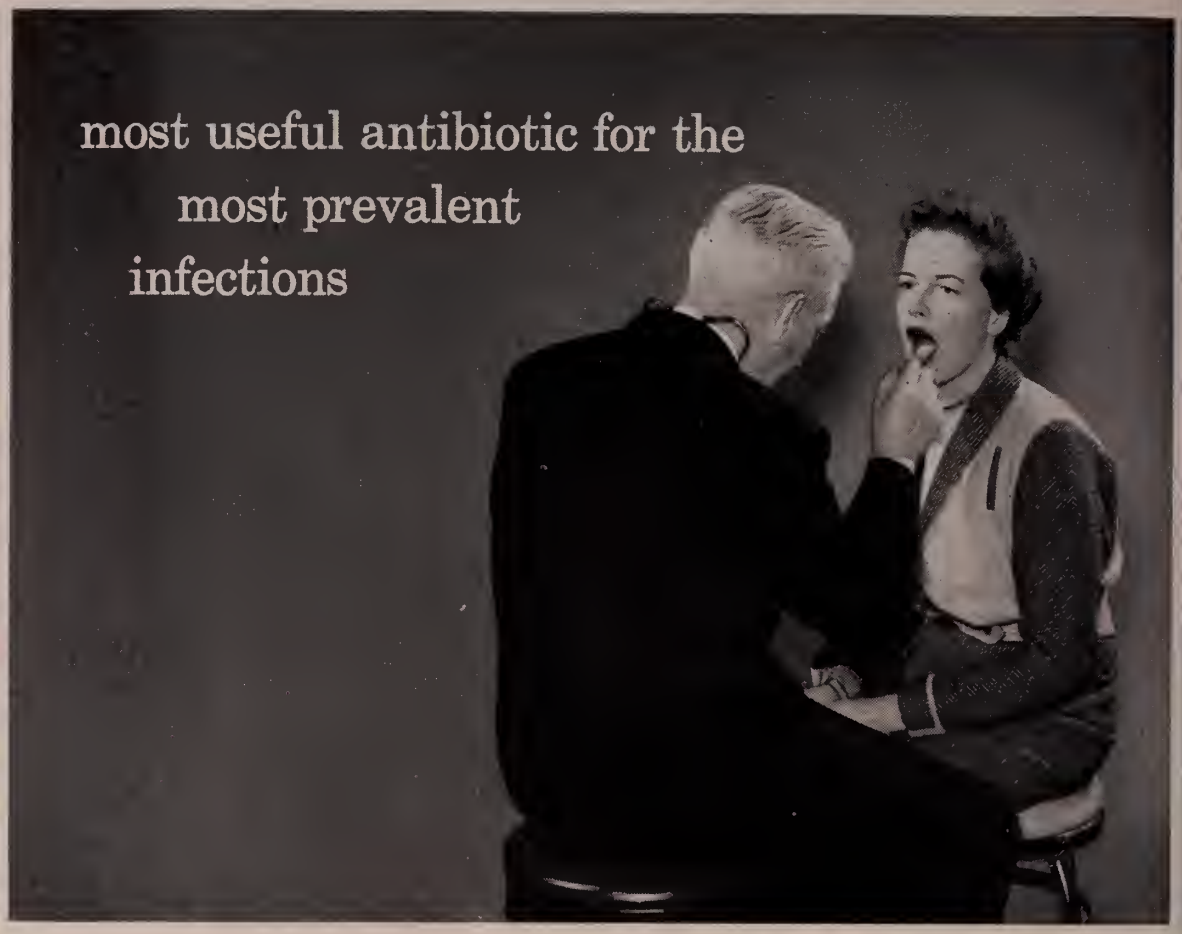
*T.M.



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Editorials • • •

Keeping the Blue Cross Out of the Red

Elsewhere in this issue, we publish a "Memo from Blue Cross." You will find it on page 539. Several of the statistical items seem to leap out of the cold type and hit us doctors right in the eye. For instance, the hospitalization incidence (admissions per thousand enrollees) skyrocketted in the last four years from 95 to 123. It seems hard to believe that the ratio of hospitalizable illness incremented more than 20 per cent—but there are the figures! Then too, average length of hospital stay has, somewhat surprisingly, started to climb. For years it has been medicine's boast that, between ambulation and wonder drugs, the average hospital stay was getting shorter. Now this trend seems to be reversing. And, like everything else, the *per diem* is on the upgoing elevator too.

Doctors can't control the *per diem* (except by avoiding needed tests and procedures, and no one asks them to do that). But doctors have some control over the decision to hospitalize or keep at home an ambulatory patient. And they have some control over the discharge date. There are a quarter of a million hospital patients annually in New Jersey. A decision to send the patient out on Friday or let him take it easy there until Monday, may add three days to the stay. If this is done on all patients, the burden on Blue Cross is upped by some 700,000 days a year! This adds up to something for an agency like Blue Cross, that pays back 91 per cent of its income.

The lesson can be colorful. The cross is blue, the books get red; the goose is golden. No sense in killing so gold a goose.

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The Seven Faces of Truth

Every doctor is tormented by the problem of truth. To tell the doomed patient the truth is to open Pandora's box and let hope, its last blessing, fly away. To deny the truth is hard on the doctor's conscience. So each practitioner, faced with a patient who is permanently disabled or whose days are numbered, has to work out some answer to this question of truth.

But truth has many faces. Its good face is well known to all. The nobility of truth, the propriety of truth-telling are stereotypes in every code. Less well known are the seven harsher faces of truth.

Truth can be pointless. Only an obsessional neurotic believes that if you know all, you must tell all. Unfortunately a doctor *can* be an obsessional neurotic. Would you tell a patient that his protein-bound blood iodine is 11 micrograms? Here is a fact he cannot understand, but one which wears the noble cloak of truth. There is the symptomless diverticulum, the invisible, meaningless congenital spinal anomaly, the functional heart murmur—all of these findings, the stock-in-trade of the quack and cultist. Truth they are, but pointless truth.

Truth can be a bludgeon. Tell a psychotic patient that he is going to be locked in a closed ward, and watch him depersonalize. Tell a patient that his illness is malignant and watch him lose hope and faith. "Blunt truths" as Pope said in his *Essay on Criticism* "are more mischievous than nice falsehoods." Some truths cannot be told gently, for their very existence may be a harshness.

Truth can worsen disease. Anxiety aggravates disease not only psychologically but also autonomically. Truth can produce anxiety. But it is never the doctor's duty to make disease worse.

Truth can make life unlivable. A child does not become "civilized" until he stops telling the naked truth. To say "I'm glad to see you" is a harmless greeting which indexes a civilized man, though it is often an untruth. The usages of polite society are erected on a substructure of white lies. If lying is sin, we all sin every day, for the pleasant fib is the oil which lubricates the social machine. Life would be unlivable if we all went around telling nothing but the truth.

Truth can be a power-tool. He who possesses the truth can use it like a whip to make his victim cringe. In telling an unpleasant truth, the teller may hide behind a facade of virtue. His unconscious motive may be far less noble, for this possession gives him power to hurt others. It is a tempting outlet for the unrecognized sadist.

Truth can be error. Elbert Hubbard once said "truth is the imaginary line which divides error into two parts." Every honest doctor has had the experience of making an erroneous diagnosis in the best of faith on the best of evidence. Each of us has seen the apparently hopeless patient live on for years—either because of some inner resource or because of a simple diagnostic mistake.

Truth can be therapy—or counter-therapy. What is the doctor's job? To effect his *own* peace of mind and salve his own conscience? To carry the torch for abstract truth? Or to help the patient? When the first two activities interfere with the third, they must be sacrificed for the physician's number 1 ob'igation: to solace the patient. Sometimes telling the truth aids in recovery. But if the truth is brutal, it is more likely to hurt the patient. Truth is a precision instrument with a two-way stretch. Whatever is good therapy is the desideratum. If truth drains out of the patient all his will-to-live, then a fig on truth! If only small doses of truth may be tolerated without panic, then truth must be prescribed in small doses. Always to solace, never to harm, are the basic component's of the good doctor's credo.

As Chancellor Bruce has put it: "Truth may be loved unwisely, pursued too keenly, cost too much." And, as Gonzalo said in *The Tempest* (II, 1):

> "My lord Sebastian,
> The truth you speak doth lack some gentleness
> And time to speak it in. You rub the sore
> When you should bring the plaster"

Diabetes Detection Drives Work

On page 496 of this issue we publish an account of last year's diabetes detection drive in our state. The scientific facts there speak for themselves. About 3 per cent of returned specimens were positive for glucose. About half of these turned out to have diabetes mellitus—mostly never suspected before.

Two aspects of this deserve special mention. One is that most physicians, when told that their patients might be diabetics, contented themselves with fasting blood sugar studies and/or urine analysis. Actually, neither of these is really adequate. An after-eating blood sugar (1½ to 2 hours after eating) is far more sensitive. It is, indeed, almost as informative as the regular sugar tolerance test, and, of course, is much easier to do.

The second point is that the drive illustrates a wonderful kind of teamwork between private practitioners and public officials. Public agencies—both governmental and voluntary—furnished the Dreypaks and handled the promotion. But the county medical societies remained the primary operating units, and whenever a positive report turned up, the patient was referred back to his private physician. This procedure—done without fanfare — is a heart-warming illustration of the kind of fruitful cooperation possible between private practitioners and state agencies, between medical societies and voluntary health organizations. The primary dividend of this collaboration was, of course, the patient's welfare. And, incidentally, it did not hurt the public relations of the medical profession one bit.

Phrase "Broad Spectrum" Retired

The phrase "broad spectrum," as applied to antibiotics is now being retired from active service by reason of over-use. The SPCE* has announced that this stereotype ("broad spectrum antibiotic") has now become so banal, so shoddy with relentless repetition, that editors who subscribe to the Code of the SPCE* will strike out the phrase "broad spectrum" wherever they see it and replace it with versatile, comprehensive, general-use, all purpose, or, if worst comes to worst, ecumenical—anything except "broad spectrum."

At the next Convocation of the SPCE,* it is expected that the word "armamentarium" (especially in 'therapeutic armamentarium') will be placed on the retired list. The Committee on Overworked Words is preparing a resolution to the effect that these phrases ("broad spectrum" and "therapeutic armamentarium") are used so widely because the writers prefer to take the first word on the shelf rather than to think of a crisper term. The use of these stale, weather-beaten, frayed, worn-out, worse-for-wear, wilted and threadbare words reflects unwillingness to dream up a more appropriate, vivider, fresher, cleaner and more precise phrase. All right-thinking physicians will join in applauding the SPCE* in this noble effort to invigorate the language.

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*Society for Prevention of Cruelty to Editors, Uninc.

Original Articles • • •

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The New Jersey Diabetes Detection Drive

A Joint Contribution to the National Detection Effort

The 1954 Diabetes Detection Drive discovered 84 diabetics most of whom were not previously known to have had the disease. Presumably a more extensive screening will turn up even more cases. The story of the 1954 drive is here compactly told.

In 1948, the American Diabetes Association helped organize the first nationwide Diabetes Detection Drive. This has continued annually. The first joint project in diabetes detection on a state-wide basis in New Jersey was undertaken in November 1953 under cosponsorship of The Medical Society of New Jersey, the New Jersey Diabetes Association and the New Jersey State Department of Health. The program objectives were the detection of diabetes disease among the citizens of New Jersey and the dissemination of information concerning diabetes. In the 1953 project, over 3,000 persons participated by submitting specimens of urine for examination. In November 1954, the second State-wide Diabetes Detection Drive was held here.

ORGANIZATION AND METHODS

In May, 1954, the Trustees of The Medical Society of New Jersey approved the joint detection program. On being notified of this, the New Jersey Diabetes Association and the New Jersey State Department of Health immediately initiated plans.

In addition to the major sponsors, the basic organizational structure included the 21 county components of The Medical Society of New Jersey, the New Jersey Congress of Parents and Teachers, the New Jersey Hospital Asso-

1. Coordinator, Diabetes Control Program, New Jersey State Department of Health, Chronic Illness Division.
2. Director of Medical Research, New Jersey State Department of Health, Chronic Illness Division.
3. President, New Jersey Diabetes Association (1954), Representative of The Medical Society of New Jersey.
4. Chairman, New Jersey Diabetes Detection Drive.

ciation, the New Jersey Society of Clinical Pathologists, the New Jersey Pharmaceutical Association, the Woman's Auxiliary to The Medical Society of New Jersey, the New Jersey Health Officers Association, the American Red Cross and numerous local community organizations.

The overall plan was to screen population samples. The sponsors agreed that all activities should be developed on a county level under the guidance of the Diabetes Detection Committee of the County Medical Society. The test kit utilized was the St. Louis Dreypak,[5] a device for the collection of dried urine specimens. One hundred thousand Dreypaks were purchased by the New Jersey State Department of Health from the American Diabetes Association for distribution by county medical societies. To reinforce the project, many county medical societies purchased additional Dreypaks and the American Diabetes Association provided a supply of test kits. Additional functions of the major sponsors were to provide stimulation, guidance and organization and to coordinate the efforts of all county and state groups who participated or cooperated in the project.

Some of the radio, television, and newspaper releases originated from the American Diabetes Association. Presentation of the aims of the Diabetes Detection Drive was made during the Governor's television broadcast in October 1954. Press releases and radio interviews were prepared by the State Department of Health for wide circulation. Local publicity was prepared under the guidance of the county medical society detection committees with assistance from local health officers, Parent-Teacher Associations, and the Woman's Auxiliary to the Medical Society in some areas. The Mercer County Medical Society, for example, devoted one of its weekly radio panel discussions to diabetes. Numerous public forums concerning diabetes were held. Posters, provided by the State Department of Health, were distributed and displayed with the assistance of the New Jersey Pharmaceutical Association. Educational pamphlets, prepared by the American Diabetes Association, were circulated to all areas through the Medical Societies, the New Jersey Pharmaceutical Association and local Departments of Health.

DISTRIBUTION, COLLECTION AND TESTING

One hundred thousand St. Louis Dreypaks were obtained by the New Jersey State Department of Health and distributed during Diabetes Detection Week in November 1954. Tables 1 and 2 illustrate this distribution, indicating that 32,000 were offered to employees of the State government, 10,000 to the employees of a cooperating life insurance company and the remainder to the general population. The New Jersey Congress of Parents and Teachers agreed to distribute educational material and test kits under the guidance of the County Medical Society. Approximately 400 Dreypaks were provided to each local Parent-Teacher Association for the testing of 100 families. This provided a wide age range, although the testing of adult family members was emphasized. Each local association organized a telephone squad to assure that specimens were submitted for study. Other methods of distribution included pharmacies, public health nurses and local health departments.

Used Dreypaks were returned to the offices of the four State Health Districts and the Division of Chronic Illness Control and were then routed to more than 60 hospitals whose laboratory services were enlisted by the New Jersey Hospital Association and the New Jersey Society of Clinical Pathologists. A life insurance company provided for the testing for their own employees. In addition, the laboratory facilities of the State Department of Health and some local Departments of Health were made available for the testing of Dreypaks. Two test methods were recommended to participating laboratories: (1) insertion of a group of Dreypaks into boiling Benedict's solution or, (2) individually testing the Dreypaks in test tubes utilizing Clinitest Tablets®.

Where a positive result was found, the participant and his physician were notified and the need for further examination was empha-

TABLE 1. DREYPAKS RETURNED*

	General Population	State Employees	Total Participants
Dreypaks returned	10,414	4024	14,438
Tests reported	7,529	4024	11,553
Reported positive	252	106	358
Ratio positive	3.3%	2.6%	3.1%

*In all, 68,000 were distributed to the general population and 32,000 to state employees. Returns therefore were 15 per cent and 12 per cent respectively.

5. Olmstead, W. H., *et al.*: *Diabetes*, 2:27 (Jan. 1953).

TABLE 2. HOW DREYPAKS WERE DISTRIBUTED

	State Health Districts	Newark Schools	Elizabeth Schools	Prudential Insurance	Total
Tests reported	2719	1886	542	2382	10,414
Positive reports	104	89	6	53	252
Ratio positive	3.8%	4.7%	1.1%	2.2%	3.3%

TABLE 3. FOLLOW-UP SUMMARIES

Number of Persons

							July 15, 1955 Incomplete Follow-up	
			Diabetes Present				Pending	Pending Public Health
	Number of Tests Reported	Screened Positive	Total	Previously Known	Previously Unknown	Diabetes Not Present	Physician Report	Nurse Report
Total	6743	210	84	26	58	90	13	23
General Population State Health Dists.	2719	104	32	11	21	53	6	13
State Employees	4024	106	52	15	37	37	7	10

sized. Follow-up procedures recommended by the American Diabetes Association were forwarded to the physician for his information. Persons with negative test results were advised of that fact.

RESULTS

About 14.5 per cent of the Dreypaks distributed were returned for testing. Among 11,553 tests reported, 3.1 per cent were positive for urinary sugar. See Table 1. Table 2 refers to the general population plus special samples, such as school systems and industries. Analysis shows that 55.3 per cent of the general population group and 82.3 per cent of state employees were in the age range of 25 to 64 years. The former group was heavily weighted with children of the "general population" participants: 42.2 per cent were male; and 57.5 per cent of the state employees were male.

Among these 6,743 persons, 210 were screened positive for urinary sugar, as is shown in Table 3. A month after Diabetes Detection Week, a questionnaire was sent to the physicians of the positive-reacting participants requesting information about the diagnosis of diabetes and the laboratory studies utilized. A second questionnaire was later sent to physicians who failed to respond to the first. Most positive reactors had, on their own initiative, reported to their physicians as recommended. The services of Public Health Nurses were made available, at the request of the physician, to visit those who failed to communicate with the doctor they named. The purpose of the visit was to interpret the need for further examination and to encourage the participant to visit his physician. Individual letters were sent and telephone calls made, when necessary. Follow-up evaluation was completed on 83 per cent of the positive reactors. A diagnosis of diabetes mellitus was established in 84 persons, or 1.2 per cent, of the group screened. Two-thirds of these had not previously been known to be diabetic.

The methods by which physicians established or ruled out diabetes are summarized in Table

TABLE 4. METHODS USED BY PHYSICIANS TO ESTABLISH DIAGNOSIS

Method	Diabetes Established	Diabetes Not Found
Urine Analysis	7	27
Fasting Blood Sugar†	41	40
Postprandial Blood Sugar†	5	6
Glucose-Tolerance Test†	7	11
Method not stated	5	6
Known diabetics not additionally studied	19	0
	84	90

†This test alone, or with urine analysis.

4. Urinalysis alone, or in combination with a fasting blood sugar, was used in two-thirds of the cases. The postprandial blood sugar and the glucose tolerance test was used by a small number of physicians. Diabetes was ruled out by urinalysis alone or in combination with a fasting blood sugar in 67 cases.

COMMENT

THE second state-wide Diabetes Detection Drive in New Jersey was carried out in a progressively efficient manner. A number of deficiencies were solved. Others became apparent in subsequent analysis. A major improvement was the increase in the number of participants. The large number of children tested seemed to be a sequel of distribution through Parent-Teacher Associations. The overall results, *i.e.*, 3.1 per cent positive reactors, correlated with the results of other mass surveys in which 2 to 4 per cent proved to have positive tests. The number of diabetics discovered was in the range of expectation.[6] The efficiency of testing groups of persons with a common bond, such as employment in the same industry, was shown. The need to evaluate the fruitfulness of test distribution methods was apparent.

Most positive reactors reported to their physicians as recommended, but some required the stimulus or interpretation of Public Health Nurse visits.

Evaluation of the procedures used by physicians to establish the diagnosis indicated a serious defect. *Urinalysis and fasting blood sugar, either alone or in combination, will fail to indicate the presence of diabetes in many instances.* The postprandial blood sugar test was not utilized often enough by physicians following the 1954 Diabetes Detection Drive. A blood sugar determination made 90 to 120 minutes after a meal containing 100 grams of carbohydrate is more reliable than the fasting blood sugar and almost as informative[6] as the standard glucose tolerance test. It is certainly cheaper and easier to perform.[7]

SUMMARY

1. In the November 1954 state-wide Diabetes Detection Drive in New Jersey, 100,000 Dreypaks were distributed and the returns carefully evaluated; 14,438 were used and returned; 3.1 per cent of the specimens tested were positive for glucose.

2. Two hundred and ten persons had follow-up evaluation based on information reported by attending physicians. Eighty-three per cent reported to their physicians for examination as they were advised. Eighty-four persons proved to be diabetic; fifty-eight were not previously known to have diabetes.

3. The methods of follow-up included urinalysis alone or in combination with a fasting blood sugar in a high percentage of cases. The glucose tolerance test and postprandial blood sugar determination were used in a minimum of cases. Increased use of the postprandial blood sugar as a follow-up procedure is urged.

6. Joslin, E. P., *et al.*: Treatment of Diabetes Mellitus. Philadelphia 1952. Lea and Febiger. Also see, Loube, S. D., and Alpert, L. K.: *Diabetes*, 3:274 (Dec. 1954).
7. Perl, A. F.: *Diabetes* 3:196 (September 1954).

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C-Reactive Blood Protein in Inflammatory Disease

Its Value As an Index of Rheumatic Activity

C-reactive protein is an abnormal serum protein found in a variety of diseases. The diagnostic and prognostic values of this test are here reviewed by Dr. Ruggieri.

During the course of certain infectious diseases, notably lobar pneumonia, Tillet and Francis [1] observed that the serum of patients in the acute phase of illness yields a precipitate when in contact with a solution of the C-polysaccharide of pneumococcus. The precipitation test is positive during the height of the disease and becomes negative shortly after onset of recovery. It closely parallels the clinical course of the infection.

The carbohydrate used as a test reagent is derived from the pneumococcus. But the presence of the active substance in serum is *not* limited to pneumococcal diseases. It occurs in a number of other infections such as acute rheumatic fever, bacterial endocarditis and staphylococcus osteomyelitis. Ash [15] showed that the C-reactive protein substance is demonstrable in sera obtained from children during the acute stage of infections due to Gram negative bacilli of the colon typhoid group. Lofstrom [2] has demonstrated that C-reactive protein is not limited solely to diseases of infectious origin. He obtained positive reactions in six patients with myocardial infarction.

PROPERTIES OF C-REACTIVE PROTEIN

This reaction depends upon the presence in the blood of a reactive substance, a protein which combines with the test carbohydrate to form a precipitate in the presence of calcium ions.[3] The test carbohydrate, C-polysaccharide, differs from the better known and chemically well defined capsular polysaccharides in containing organically bound phosphorus, an acetylated amino-sugar, but no uronic acid as constituent parts of the molecule. The reaction is not restricted to pnuemococcal disease. It occurs in a number of other diseases of widely diverse origin. The phenomenon is *not* specific with respect to the inciting agent. Since the reactive substance is found in the blood in a number of unrelated infections it is evidently not derived from the bacteria themselves. Seemingly it arises in the host as a result of pathologic changes induced by or associated with acute infections or inflammation.

Certain distinctive features distinguish it from immunity reaction in general. In pneumonia the C-reactive substance first appears in the blood early in the course of the inflammatory process. It persists during the activity of the lesion and disappears from the circulation shortly after crisis. This sequence of events with respect to the time of appearance and disappearance of the active substance is the reverse of that usually noted in the development and persistence of the specific antibodies. Furthermore, although widely different animal species may produce type-specific antibodies to pneumococcus, the C-reactive protein has

been found in the blood during acute pneumococcic infection only in the related species, man and monkey. The occurrence in the rabbit of an acute phase protein analogous to human C-reactive protein has recently been described by Anderson and McCarty.[16] The acute phase protein of the rabbit reacts with a special form of the pneumococcal somatic polysaccharide, designated C-polysaccharide, in the same manner that the human C-reactive protein reacts with the classical C-polysaccharides. The C-reactive protein of the rabbit has been shown to be remarkably similar to human C-reactive protein in its general properties and in the conditions which govern its appearance in the blood. It thus appears that the rabbit can be used as a laboratory model for further investigations of the more basic problems concerning C-reactive protein in humans. Moreover, C-reactive substance is not specifically related to the etiologic agent as is the case with most antibodies that arise in response to infection. In addition, studies have shown that unlike most antibodies, the reactive substance in patients' sera is present in the albumin and not in the globulin fraction precipitated from serum by half saturation with ammonium sulfate. However, there is not complete agreement on this point. Electrophoretic studies by Perlman [4] and associates indicate that the C-reactive substance is contained in the alpha globulin fraction. Another peculiarity which seemingly distinguishes the reaction under discussion from known antigen-antibody reactions is that the calcium ions in the reacting mixture are essential in the formation of the precipitate. Abernathy and Avery [3] showed that no precipitate occurs when the polysaccharide is added to a reactive serum from which the calcium has been removed, even though optimal amounts of sodium chloride are present. However, the precipitating action of the calcium-free serum is completely restored by adding calcium in a concentration much lower than that normally present in the blood. In the usual antigen-antibody reaction, precipitation is not determined by the presence of calcium ions as is the case in the reaction under discussion.

MacLeod and Avery [5] used fractional saturation methods with ammonium and sodium sulfate and subsequent dialysis of the albumin fraction of serum protein. They were able to isolate the reactive protein in a relatively pure state. In this study, to determine the relation of lipids to the reactive protein, acute phase serum was treated with alcohol and ether. An attempt was made to separate the reactive protein from the defatted serum. The results indicated that the serum lipids are of importance in determining certain of the properties of the reactive protein, particularly its sensitivity to calcium as indicated by increased solubility in tap water. The reactivity of the defatted albumin with C-polysaccharide remains unchanged. The lipids are not essential in the precipitation reaction since they can be extracted without impairing the capacity of the protein to react with polysaccharide.

In subsequent studies, McLeod and Avery [6] described the specific antigenicity of the reactive protein. Serum of rabbits immunized with C-reactive protein prepared from blood obtained at autopsy from fatal pneumonia cases reacts specifically with the purified preparation of the protein as well as with the protein as it occurs in the serum of man and monkey during the course of acute bacterial infections. Only negligible reactions occurred when normal human sera were mixed with the rabbit antiserum. This trace of cross-reactivity was removed by absorption without appreciable loss in the titre of the antibodies to the C-reactive protein. From their results, the investigators concluded that the reactive protein differs in both its chemical and immunological properties from normal human and monkey serum.

In 1947, McCarty [7] described the isolation and crystallization from human serous fluids of the C-reactive protein. The source material was chest or abdominal fluid from patients rather than blood serum. Larger volumes of fluid containing C-reactive protein are more readily available in this form. When the albumin fraction from chest or abdominal fluid is dialyzed against tap water, precipitation of the C-reactive protein does not occur. In this respect, therefore, the fluids behave like blood

serum after the removal of lipids. McCarty [7] prepared rabbit antisera using the crystalline C-reactive protein and when the crystalline C-reactive protein was treated with antisera, it became apparent that the antisera provided a sensitive reagent for the detection of small amounts of C-reactive protein. When normal sera was treated with the antisera no precipitation was obtained. One may therefore conclude from this that the crystalline protein used for immunization of the rabbits contained no appreciable amount of normal serum protein. On the other hand, the antiserum reacted strongly with the acute phase serum of patients with certain infections.

AN INDEX OF RHEUMATIC ACTIVITY

A RELIABLE and sensitive index of rheumatic activity has become a necessity with introduction of steroid therapy and surgery in the treatment of rheumatic heart disease. C-reactive protein in the blood, as a measure of activity, offers much promise in this direction.[8-12] Anderson and McCarty [9] state that the presence in the blood of C-reactive protein is perhaps the most sensitive indication of activity of the rheumatic process. They found it the most consistently positive laboratory test in the presence of rheumatic activity. Their results have been confirmed by Stollerman. Rothbard [13] and associates, in a bacteriologic and immunologic study on hemolytic streptococcus infections as related to rheumatic fever, observed that C-reactive protein was positive in 75 per cent of the streptococcus infections. In the patients showing positive reactions, it was usually detected in the serums obtained during the acute streptococcus phase and during the time of purulent complications, as well as in the period of greatest rheumatic activity. It occurred in 57 per cent of the patients without complications, in 75 per cent of those with purulent complications and in 97 per cent of those in whom rheumatic fever developed. The presence of C-reactive protein in the sera showed a close correlation with the intensity and durations of the inflammatory reactions of the host as indicated by elevated temperatures and increased serial erythrocyte sedimentation rates. C-reactive protein persisted longest in the sera of patients with rheumatic fever.

Anderson and McCarty [9] noted that the changes in the amount of C-reactive protein present tend to parallel changes in the erythrocyte sedimentation rate. This is not 100 per cent true. C-reactive protein may be absent from the blood when the sedimentation rate is much higher. In one case [11] the erythrocyte sedimentation rate, six weeks after clinical recovery was 73 millimeters in one hour, though clinical evidence of residual activity was lacking and C-reactive protein was not detected. A month later the erythrocyte sedimentation rate was 14 millimeters. After another month it had fallen to one millimeter in one hour. In most cases, the interval between the first negative test for C-reactive protein and the first normal erythrocyte sedimentation rate did not exceed a few days. In the early recovery period, the C-reactive protein usually becomes negative before the sedimentation has returned to normal. This is not an invariable relationship, however. C-reactive protein may be present in the blood when the sedimentation rate is normal. This discrepancy probably indicates that C-reactive protein is not in any important way related to changes in the sedimentation rate, although this point has not been conclusively tested experimentally.

IN THE studies performed by Stollerman [12] and associates, C-reactive protein was present in moderate to large amounts in the sera of 34 out of 35 patients with the frank manifestation of rheumatic fever. The one patient in whom the test for C-reactive protein was negative had Sydenham's Chorea, slight elevation of the sedimentation rate and soft apical and basal systolic murmurs of possible significance. Despite the clinically apparent low-grade nature of the rheumatic process, he was classified as having frank rheumatic fever on the basis of the rigid criteria established for the study. Ten out of eleven patients studied

during the stage of low-grade activity were positive for C-reactive protein. The exception, in whom the test was negative, did not strictly meet the criteria for activity. Following a bout of congestive failure this patient had neither elevation of the sedimentation rate, fever, or heart-block, but because of the persistent tachycardia and impaired cardiac reserve he was considered to have low-grade carditis. Another group of eleven patients in whom there existed doubt as to whether activity had subsided, because of persistent elevation of the sedimentation rate, showed a positive reaction in six instances.

During anti-rheumatic therapy with cortisone or ACTH, reversal of the test from positive to negative takes place. In Stollerman's experience,[12] this usually occurred within the first week of treatment. Persistence of a positive test during steroid therapy is an indication that dosage is not large enough to suppress all activity. A negative test during therapy does not necessarily indicate termination of the rheumatic process. A high proportion of patients will show symptoms, signs, or laboratory evidence of relapse when steroids are discontinued. In most instances, the transient nature of this relapse is reflected in the spontaneous disappearance of C-reactive protein from the serum in two weeks. If the C-reactive protein is positive for longer periods it should be considered evidence of persistence of the acute rheumatic process and treatment re-instituted. Attempts to lower dosage too rapidly will result in prompt re-appearance of C-reactive protein before any other clinical or laboratory sign of relapse is evident. The test thus serves as a sensitive indicator of suppression of the inflammatory process.

Stollerman[12] found it impossible to reverse a positive test with acetyl-salicylic acid despite maximum tolerance doses. In general, however, C-reactive protein disappeared in most patients on acetyl-salicylic acid as clinical manifestations of the disease subsided.

Various manifestations and stages of the rheumatic process may be so low-grade as to be below the threshold of an inflammatory stimulus necessary to cause the appearance of C-reactive protein. This is the case in chorea erythema, marginatum, subcutaneous nodules; Aschoff bodies in the auricular appendage, prolongation of the P-R interval, between polyclic attacks and the latent phase of activity. Therefore a negative test does not necessarily exclude the presence of activity. However, a consistently positive test usually provides reliable evidence of the persistence of activity. In the presence of congestive heart failure the sedimentation rate may be depressed to normal values, despite the presence of frank rheumatic activity. Under these circumstances, the C-reactive protein test remains positive, usually. False positive tests do not occur since C-reactive protein is not present even in trace amounts in normal sera.

THE test is of little help in the differential diagnosis of rheumatic fever. Many other diseases with closely related clinical configurations are characterized by the presence of C-reactive protein. A mild upper respiratory infection in itself may produce a positive test. The significance of a positive test in a rheumatic subject must, therefore, be interpreted with caution. C-reactive protein will promptly disappear at the termination of an uncomplicated respiratory infection, in contrast to its usual persistence for several weeks, months or even years in association with active rheumatic fever. Once the diagnosis of rheumatic fever has been made, the test is of real value. Its practical value is illustrated by a case cited by Anderson and McCarty.[9] "A young boy convalescing uneventfully from acute rheumatic fever was about to be discharged from the hospital when right lower quadrant pain, tenderness and a low-grade fever suddenly developed. The obvious diagnostic problem was that of differentiating between acute appendicitis and a recurrence of rheumatic fever. C-reactive protein had been absent from the blood for some time and on the basis of previous experience with the test it was reasoned that in the presence of rheumatic activity, C-reactive protein should have made its re-appearance. The test was carried out and found to be negative. The boy was subjected to a

laporotomy and an acutely inflammed appendix was removed." With appendicitis of longer standing, C-reactive protein would probably have appeared but early in the disease it was absent.

The occurrence of C-reactive protein in some of the other collagen diseases has been investigated.[10] In rheumatoid arthritis a significant proportion of apparently active but afebrile cases failed to show detectable C-reactive protein in their sera. This imposes a serious limitation on the use of the reaction in this disease. When C-reactive protein is present initially, the results of serial tests seemed to reflect changes in clinical activity quite closely. C-reactive protein is not present in the serum of patients acutely ill with disseminated lupus unless there is a super-added infection. Likewise, in dermatomyositis and scleroderma, C-reactive protein is consistently absent.[10] Gout, though classed as a metabolic disorder, presents during its exacerbation many of the systemic features of acute inflammation. To the regular accompaniments of acute episodes such as leukocytosis and elevated sedimentation rate, can be added the presence of C-reactive protein, a phenomenon observed by Hedlund [14] as well as Hill.[11] Since C-reactive protien is absent in acute disseminated lupus, the test may be of differential value. Its absence in a case of acute febrile polyarthritis might help in differentiating between rheumatoid arthritis and acute disseminated lupus since C-reactive protein is always present in febrile rheumatoid arthritis, although as stated it might be absent in afebrile rheumatoid arthritis.

SUMMARY

THE appearance in the serum of an abnormal protein, (C-reactive protein) is a phenomenon common to a variety of diseases. Its close time relationship with acute phase of an illness has been recognized for some time. This relationship has recently been clearly demonstrated in rheumatic fever in which disease tests for C-reactive protein have been said [9] to provide the most sensitive indicator for the presence of rheumatic activity which we now possess. Despite certain limitations, the test is proving useful in the management of the rheumatic fever patient. The poorly defined "normal range" of the sedimentation rate in rheumatic fever has been the basis for uncertainty in the evaluation of certain cases. C-reactive protein is of value in resolving some of these difficulties. Comparison of changes in the sedimentation rate and in C-reactive protein titres during fluctuations in activity disclose a tendency for the latter to respond more promptly. C-reactive protein usually disappeared during the early recovery period while the sedimentation rate was still elevated. The test is simple to perform and may be routinely employed, now that specific antisera are commercially available.

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A bibliography of 16 citations appears in Dr. Ruggieri's reprints.

Mittens for Forceps

Greenberg* reports on the use of removable foam-rubber mittens on obstetrical forceps. He finds that this device has materially reduced surface injury to the head of the newborn baby. Greenberg now suggests that similar mittens could be developed for clamps, forceps and retractors in general surgery, as a prevention of retraction trauma. Why not?

*Greenberg, E. M.: Annals of Surgery, 87:937 (1955)

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Recent Advances in Dermatologic Therapy*

During the past years pharmaceutical science has opened to us a veritable wonderland of drugs for dermatology. Dr. Block gives us a rapid run-down.

In the past five years, many new drugs have been made available. Some of the newer textbooks have, at last, deleted some of the outlandish dermatologic names, and grouped certain "individual diseases" into general categories as they have become vulnerable to the vast amount of equipment we are now prepared to use.

I will here group therapeutic modalities in their action on the various diseases rather than describe the diseases and then their treatment. I will limit myself to the material accumulated in the past five years.

ANTIBIOTICS

Antibiotics still attract much attention and for good reason indeed. Three years of continuous therapy was the standard treatment for early syphilis twenty-five years ago and we saw many early cases. Today, the disease itself is a comparative rarity. However, if a primary or early secondary stage is found, we have *therapeutica magna*: 2,400,000 units of benzanthine penicillin in aqueous suspension (Bicillin L. A.®) in a single dose injected intragluteally. This treatment is recommended by the United States Public Health Service.

External otitis due in 99 per cent of cases to the Bacillus Pyocyaneous (today called pseudomonas aeruginosa) is completely vulnerable to Polymixin B [1] and Neomycin [2] applied locally, a popular proprietary called Neosporin [6] Ointment.

Inflammatory pyogenic processes are no longer the formidable problems they were. A culture can be taken and sensitization tests of the organism to penicillin, Aureomycin,[3] Terramycin,[1] erythromycin or Achromycin,[3] determines the vulnerability and the appropriate medication is applied with gratifying results. The condition clears rapidly and the dermatologist receives his well won reward for his persistent research and tireless patience with praise rather than, as formerly, with abuse from the patient for the slow progress shown. Other colleagues have had similar problems unsolved; *e.g.* leucorrhea to a gynecologist, adhesions to a surgeon, chronic rhinitis to a rhinologist, deafness to an otologist or amblyopia to the ophthalmologist. Uncomplicated stasis ulcers have responded rapidly on ambulation to dry powdered chloramphenicol or Aureomycin [3] with three or four local applications weekly. Similarly Sterosan [19] in a vanishing cream base has brought these lesions under control when nothing else would help, with rapidity and comfort.

Mycostatin [40] 500,000 units relieves monilial infections about the perineal areas. It is given after meals two or three times a day.

*Read at the Dermatology Section, Annual Meeting of The Medical Society of New Jersey in Atlantic City on April 18, 1955.

Terramycin [1] and Aureomycin [3] have helped in rhinoscleroma.

FUNGICIDES

Newer fungicides locally have shown no great advantage over the older medications. Asterol [4] and Salundek,[5] the latest of these, are controversial in their value over sulfur, tar, salicylic acid or ammoniated mercury. In the deeper mycoses, however, the stilbestrols and their derivatives have proved of value, remembering, however, that toxicity may involve the 5th and 8th cranial nerve and also bring about peripheral neuritis. Blastomycosis and sporotrichosis have responded favorably. Stilbamidine [7] (150 milligrams in 200 milliliters of 5 per cent glucose solution given intravenously daily for three weeks) has cured even old resistant cases.

Terramycin [1] and penicillin are now used instead of the sulfonamides in actinomycosis and have very little to do with the outcome. The secondary invaders are destroyed, but Lamb [34] has shown that there is no effect on the organism. As a consequence x-ray and local surgery are still the best portions of the treatment in the severe cases.

Scalp lesions are still treated best by x-ray epilation and secondly, by manual epilation. Topical antifungal treatment is of value only in the M. Lanosum (animal type) for rapid cure.

ANTIHISTAMINICS

Antihistaminics have proved disappointing although the manufacturers still boast of their topical effects. Topically, they have little or no value. The base itself or the psychogenic factor relieves. Many show high sensitizing indices when applied this way.

Systemically, they help chronic urticaria and dermatitis venenata. In acute cases or acute exacerbations of the allergic manifestations of hay fever, rose fever and asthma with dermatitis complicating it, if given early they are of value.

PIGMENT AGENTS

Psoralens [8] have been a very exciting rediscovery and the isolation of the melanocytic stimulating hormone has made many an older physician gasp at the rapid knowledge we are accumulating on skin pigmentation. This hormone has not produced pigment in vitiliginous areas but it can turn normal white skin practically black enhancing the appearance of the depigmented area to the point of making the patient look like a leopard. It then evolves upon us to use the Egyptian Psoralens, *i.e.*, Ammoidin [8] or ammidin which are highly toxic, particularly to the liver. The Elder Company has put this on the market in the form of Oxopsoralen.[8] Two capsules are given 2 hours before going into the sun for adults; one is given daily for children. Liver function tests are taken monthly for the first three months, and less often thereafter. Some pigmentation is seen in some lesions but not enough to use a measure of this toxic type with hope for a decent appearance in most cases. Unless this modality can be relieved of its toxicity, it will be relegated to the state in which thallium is today as an epilator for tinea capitis.

However, in persistent chloasma; overtreatment with ultra-violet light and superficial melanosis, we can rid the patient of these ugly brown spots ("liver spots" to the layman) with the use of mono-benzyl ether of hydroquinone (Benoquin [8]) rubbing a 20 per cent ointment into the lesion daily. If sensitization is present, reduce the strength to 10 or even 5 per cent. My experience has been gratifying in this. I wonder if similar x-ray pigmentation might not also be reduced. I have had no experience with it, since this condition is so rare with the modern careful use of x-ray.

ANTIMALARIALS

We have had difficulties with atabrine in the Pacific zone during the war. Sensitization lesions developed which appeared to be the same or equal to those of hypertrophic lichen planus. However, this drug has brought gratifying results in the treatment of chronic discoid lupus erythematosus; solar urticaria and

hydro-aestivale. The dose is 100 milligrams three times a day for one week; 100 milligrams twice a day for 5 days then 100 milligrams daily. The lesions are rapidly removed in 80 per cent of the patients. Although complications of yellow color and occasionally pityriasis rosea-like lesions appear, the patient does not complain when he is rid of his scarring erythema. If there is apprehension in the use of this drug, chloroquine diphosphate has a similar but slower effect and is used in the same way; 250 milligrams 3 times a day for one week; 250 milligrams twice a day for 5 days; then 250 milligrams daily. Plantar warts have also been reported as responding well to this modality. Psoriasis vulgaris has been a disappointing disorder for treatment by this method.

ENZYMES

TRYPSIN has been used as a debridement procedure for necrotic tissue in the form of Tryptar,[10] a rather expensive preparation, in preference to the older Gastrin.[9] Trypsin also is given intravenously for acute thrombophlebitis and gangrenous subsequences of diabetes mellitus and Buerger's disease as long as some vessels are patent. However, sclerosis of the introducing veins and decomposition of the product in aqueous solution are drawbacks. Trypsin in oil (Parenzyne[11]) in 5 milligram doses in a dry syringe given daily; then two or three times a week; then once a week has overcome this disadvantage and rapid loss of pain with early ambulation make this enzyme a valuable one. It is given intramuscularly.

Hyaluronidase has stopped early keloid formation and has made many disappear by the simple injection of 150 Turbidity Units into the keloid weekly for 10 or 12 doses as reported originally by Cornbleet.[24] Late keloids are prepared by injecting the keloid first for 4 or 5 doses and then removing it. In this way they will not recur. It also enhances the resolution of the scleroma stage of rhino-scleroma by injecting it before each x-ray treatment.

Heparin has proved invaluable in tuberous xanthomas. One cubic centimeter injected weekly for 10 or 12 doses will flatten the tuber in most cases. It has no effect on the deeper internal processes which are treated with choline or heparin and other substances necessary to the economy of the body which in general has a high lipid blood content. There are many enthusiasts for choline in the treatment of psoriasis. I have seen in it no favorable action on this capricious disease.

TRANQUILIZERS

IN GENERAL, in the neurodermatoses, a tranquilizer will be of great help in keeping the anxiety of the patient at a minium when all seems lost, particularly in a spreading generalized neurodermatitis. Chlorpromazine in 10 to 25 milligram doses three times a day is of great value as are the Rauwolfia derivatives, for example, reserpine in 0.25 milligram doses. Side effects are jaundice, urticaria, granulopena, hypotension and drowsiness. Nappi and I have found one patient who developed a purpuric rash on the forearms, legs and buttocks after an injection of chlorpromazine which disappeared in two or three weeks following cessation of the drug. Cozzarelli[26] reports a similar result. I have two stable patients who complain of nausea after taking chlorpromazine, 25 milligrams three times a day.

When patients have not improved by these methods and become suspicious of medication, hypnosis is ideal. It is relatively easy to apply since all that is being done is to make a suggestion and have the patient accept it. These rules are to be followed if this method is to be used: (1) The patient must be intelligent. (2) He must be willing to accept the suggestion and not be antagonistic. (3) The word "hypnotism" is not mentioned. (4) The surroundings must be relatively quiet.

VITAMINS

VITAMINS are used as follows:

(a) Nicotinic Acid, 25 milligrams, to prevent iodide aggravation in acne vulgaris.

(b) Pyridoxin B-6, 30 milligrams three times a day; and riboflavin 10 milligrams, three times a day, in seborrhea.

(c) Isoniazid, 50 to 100 milligrams three times a day in dermal tuberculosis. Although, it has had a euphoric effect on sarcoid patients, investigators like Edelson [27] and Bleiberg [41] report good results, while Costello [25] and Willner [39] found no value whatever in treatment of sarcoids. I have seen no clear-cut improvement in sarcoid with isoniazid. Grunberg [29] found it of no value in the treatment of leprosy.

(d) The usefulness of vitamin E in the treatment of lupus erythematosus is a matter of controversy. To be used properly, the dose must be high: 600 milligrams a day. Some authorities combine the vitamin E with calcium pantothenate. If used on epitheliomata, they must be thoroughly curetted before vitamin E will show any lasting value.

(e) Vitamin B complex and high protein diet have been reported of great value in acarophobia, *i. e.*, the delusion of parasitosis.

SIMPLE CHEMICALS

Selenium has proved its value in seborrhea and seborrheic dermatitis of the scalp. Its oiliness is preventable by the use of tincture of green soap as the shampoo. The proprietary is called Selsun [18] suspension. One per cent sodium sulfacetamide emulsion is also being used in this condition with effective results. The proprietary is called Sebizon.[12]

Shelley's ingenious experiment [38] has shown that bacteria and their decomposition give disagreeable body odors and that a soap substitute, Entsufon [13] with 3 per cent hexachlorophene (pHisohex [13]) can reduce bacterial flora by washing with it in the axillae and groins. Body odor is not detected for 18 hours at a time and the dangerous aluminum deodorants need no longer be used. Dial [10] soap exerts a similar but less marked effect.

Gelatin has softened brittle nails by the ingestion of this food daily. Glycine apparently is the effective element.

HORMONES

The corticotrophic hormone has been found to work more often and more rapidly than the others on the skin lesions of pemphigus, acute and subacute lupus erythematosus and Boeck's sarcoid. However, for ambulatory work, cortisone and hydrocortisone being given orally are more convenient. It is best to begin with the corticotrophic hormone, 10 to 20 units intravenously daily, and then intramuscularly in gel form 20 to 40 units daily.

Cortisone is given at the rate of 300 milligrams the first day, 200 the second day and 100 milligrams daily thereafter. This can gradually be brought down where often times the patient can be maintained on 25 milligrams once or twice a week particularly in pemphigus.

Hydrocortisone is potent in the reduction of pruritus by local application, particularly in the ano-genital regions, plaques of neurodermatitis, nummular eczema, contact dermatitis and early lesions of discoid lupus erythematosus. It can be used in liquid suspension or ointment form in 1 to 2½ per cent strength rubbed into the affected parts 2 or 3 times a day. Its halogenated form, fluoro-hydrocortisone only needs 0.1 per cent to 0.2 per cent strength to accomplish the same or better results. I have seen very little difference between the 0.1 per cent and 1 per cent strength over the higher concentrations. Hydrocortisone also is invaluable in reducing sarcoid and synovial cysts by injecting small quantities locally into the lesions—0.1 cubic centimeters weekly. It is not of any value locally on fungal infections.

Cortisone and hydrocortisone have been used on the treatment of alopecia areata with some startling results and some failures. I wonder if some of the failures are not due to the mistaken diagnosis of pseudopelade which often resembles alopecia areata.

Two new steroids many more times clinically effective than the above, Meticorten and Meti-

cortelone [12] may still give us more favorable agents than those just mentioned.

Estrogenic lotions have been reported as being valuable in the adjunct treatment of acne vulgaris by Shapiro [37] using Premarin [14] in a shake lotion.

PHYSICAL FACTORS

CATHODE rays, *i.e.*, high energy rays have proved valuable in the lymphoblastomas particularly mycosis fungoides. These are similar to gamma rays but a whole body surface can be irradiated in one sitting by this modality. There is only one machine at this time in existence and it is in Boston. The patient is wheeled under the rays which are perpendicular and directed through a hole in the ceiling from the room above. There is no angular deviation. So far, sequelae are not reported but time will tell. It has also been used successfully recently in atopic dermatitis, exfoliative dermatitis, disseminated neurodermatitis and seems to have helped a little in generalized psoriasis.

Thorium X is valuable in port-wine stain, hypertrophic lichen planus, persistent plaques of psoriasis and persistent lichen simplex chronica (300 millicurie weekly or monthly). Its action is highly superficial and does not reach the body of the sweat or sebaceous glands.

Its action depends on alpha radiation which can be blocked by ordinary paper. It is far safer than radon with its half-life being the same 3.6 days, but its alpha radiation is 91 per cent against 76 per cent from radon. Furthermore, its gaseous half-life is 60 minutes against 22 years for radon and so the disposal problem is eliminated. Grenz rays are being brought to date and the dangers limited by new safeguards. Protection is not important, but its use is limited to superficial lesions and in many cases Thorium X can accomplish the same results. Burrill,[23] Hanfling [30] and Sweely [23] can explain this in more detail.

Corrective planing of the skin has been reintroduced by Kurtin.[33] A stainless steel wire brush on a dentist's drill holding the brush at right angles to the lesions, ethyl chloride freezing and very little antisepsis is all that is necessary.* This, I feel, is safer than the painful sand-papering technic which can produce small keloids and sand granulomas, and possibly ten years later a silicon granuloma as described by Epstein.[28] Treatment should be limited to superficial acne scarring and not the ice pick or serpiginous types. It is also valuable in small recent tattoos, freckles, seborrheic keratoses, small-pox scarring, and superficial pigmented moles. Complications are only temporary. These include persistent erythema, hyperpigmentation, milia, pyoderma, and eczematous reactions. Phenol has been re-introduced by MacKee.[35] The method is more exacting — and more painful. I do not think that it will supplant plastic planing.

ANTICHOLINERGICS

THE anticholinergics or inhibitors of the parasympathetic nervous system are being heard from. The most popular ones are Banthine,[15] Probanthine [15] and Prantal.[12] Dermatologically they are mostly used to prevent profuse sweating. Locally, Prantal [12] has proved highly sensitizing. Small doses of atropine or belladonna are not used any more, although they have the same therapeutic effect. I have found dilated pupils, urinary suppression and dry tongue as often with these newer drugs as with belladonna and atropine. I cannot understand why the proprietaries are so often preferred.

PROTECTIVES

PROTECTION against detergents and irritating solutions is no longer just an industrial problem. The housewife is also using detergents and solvents. Rubber gloves with cotton lining cannot be used all the time. Silicones have, therefore, made their way into dermatology, *i.e.*, 30 to 50 per cent silicon in a petrolatum base or using Bentonite as an emulsifier should protect hands against wet work. These include Proderma,[16] Silicote,[17] Covicone,[18] and Kerodex.[14]

* I use Freeon,[20] a proprietary non-anesthetic freezing agent.

Remembering the silicon granuloma report of Epstein,[28] however, I should still advise great caution in routine use. Be sure the skin is no longer irritated and is well recovered from any fissuring before advising these protectives. Acid-Mantle-Creme [19] is also used before immersing the hands to keep a proper pH and thus prevent the disastrous results of the alkaline contact dermatoses.

Chelation, that is agents forming stable non-ionizing complexes with elements of the alkaline earth and heavy metals are being investigated. Kurtin [33] has used disodium-ethylenediamine-tetracetic acid to neutralize ionic nickle. If this becomes practical, a great deal of metallic and alkaline earth dermatitis will be eliminated.

CONCLUSION

IN CONCLUSION, these several pertinent questions are raised and should be investigated by the dermatologist:

1. Why is scabies disappearing while pediculosis is not? Is it because of the newer detergents in laundering? If so, is their index of sensitivity so great that this type of cure is worse than the disease?

2. What systemic treatment is it possible to find that will rid us of superficial fungi particularly of the scalp and feet? Thiamine has been found necessary for their economy. We have one new systemic modality, as mentioned, for the deeper fungi, *i.e.*, stilbestrol derivatives.

3. By what means (other than avoidance of moisture) may we dessicate the skin to produce its self-sterilization as pointed out by Kligman? Hexachlorophene, a chemical, also sterilizes, but occasionally sensitizes.

4. Will the treponema immobilization test eventually be the specific test for syphilis and supplant all others?

5. What does hypnosis have to do with relieving congenital diseases of the skin? Two impressive cases have been reported in:

(a) Congenital ichthyosiform erythroderma of Brocq

(b) Pachyonychia congenita

6. Why not adopt the newer U.S.P. formulae for:

(1) A washable base (Hydrophyllic Ointment) and

(2) A greasy base similar to Aquaphor [22] and capable of water incorporation, *i.e.*, hydrophyllic petrolatum ointment.

316 Mt. Prospect Avenue

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DISCUSSION

J. R. Tobey, Newark: Dr. Block's comprehensive paper should give us some idea as to the vast quantity of researeh being conducted in the many dermatologic centers throughout this nation. Both the basie faetors of skin physiology, and the status of recent discoveries which may prove to be of value in the treatment of skin diseases, are being investigated with a thoroughness lacking in earlier years. The more-frequent use of the fully-controlled study in clinieal evaluations of the newer agents, is responsible for the greater excellence and qualitative value of the current articles in our journals—thus eliminating the bilge of the all-too-common "before and after" study which has almost swamped the progress of correct skin therapy, under a flood of highly-praised and relatively ineffective agents for so many years.

The specialty of syphilology now may be considered as almost dead. Patients with early syphilis are rare. Still, reports from many centers during the past two years have shown a perceptible rise in the incidence of primary and secondary syphilis. Over-optimism in government agencies has led to an extreme cut-back in the funds available at the centers and hospitals responsible for the over-all detection and control of the disease from 1945 to 1952. Today, there is almost no way of providing an adequate, well-organized case-finding and case-following service. Thus, one of the best preventive measures against the dissemination of this infection is missing. Under these circumstances, it is more neeessary now than ever before that the physician maintain "the high index of suspicion" preached by John Stokes and many others in our fight against this greatest of all the "Imitators."

Regarding the use of Neomycin[2] ointment, either alone or in combination with other ointments, it is becoming more evident that it has one distinct disadvantage. Neomycin[2] topically not only encourages the overgrowth of the ever-present spores of candida albicans in previously-uncomplicated lesions, but it also enhances the severity of, the extension of, and the chronicity of lesions which have been assumed to be simple pyogenic conditions—but which actually have been undetected sites of moniliasis cutis caused by this same potentially-pathogenic organism. Thus when Neomycin[2] is employed, it is not uncommon to see flares of old lesions and extensions of new ones in such conditions as otitis externa, paronychia, pruritis ani, chronic eruptions of the hands and feet, contact dermatitis and other dermatoses. Polymyxin[1] does not have this disadvantage, and is just as effective against the same organisms which are susceptible to Neomycin[2] — including pseudomonas aeruginosa.

Regarding the use of the Psoralens[8] in vitiligo and of Benoquin[8] in chloasma, we should have definite reservations about any method which seeks to produce a cosmetic effect in a benign condition by inducing photosensitization of the skin through the combination of a contact sensitizer and an exposure to ultraviolet light. The production of photosensitization in a person with latent atopic tendencies may lead to a severe, generalized exfoliative dermatitis. Photosensitization in a person with latent or subclinical lupus erythematosus will result in an acute onset of this serious disorder, and the threat of a fatality. The skin is a leading shock organ of allergic and collagenous reactions, and it is not likely to submit to being bludgeoned into either making pigment or losing pigment without showing permanent damage. It is likely that the Psoralens[8] and the Benoquin[8] type of preparations will go the way of sulfathiazol ointment — now abandoned as treatment for the common pyogenic infections—since the risk of permanent skin damage more than outweighs the expected benefits. Perhaps information derived from the carefully-controlled studies of these pigmenting and depigmenting agents will lead us to better — and safer remedies.

The frequent use of cortisone and similar compounds in the less-fatal, but just-as-disturbing and certainly more-common allergic dermatoses—such as, urticaria, giant urticaria, atopic dermatitis, and allergic contact dermatitis — has led many to believe that these agents will "cure" the condition. More and more patients with these conditions are being kept in vain, on maintenance doses or repeated courses of these steroids, because the eruption promptly recurs—no matter how gradually the dosage is reduced, and often during the process of reducing the dose. These agents, like the antihistamines, are useful only in relieving the symptoms—just as aspirin is used in headaches. The physician must make every effort to identify the responsible allergens—for example, homogenized milk, vitamins derived from natural sources, elixir phenobarbital, contacts with soaps, detergents, wool, lanolin, and many others. In order to cure the condition, the physician must know how to exclude such items from the patient's environment. He should not expect a miracle from the steroids which, no matter how powerful they are, do not remove the cause.

We must not agree with the suggestion that the pigmented mole may be removed by corrective skin planing. While Dr. Block has specified that this applies only to the superficial variety of moles, there are serious objections to any method of evaluation which concludes that a particular mole is located superficially in the skin. One exception, is the evaluation microscopically of the biopsy specimen, composed of the entire lesion, with full skin thickness and adequate margins of excision. The mole—properly known as the intradermal cellular nevus—whether it is raised or flat, is like an iceberg. While the greatest concentration of pigment is found high in the dermis, yet there are groups and strands of normal nevus cells which often extend down into the lower portion of the dermis. In some cases, they surround the deepest part of the hair follicles, and occasionally, normal groups are found bordering on the subcutaneous fat. Superficial treatment, such as planing or electrodesiccation—so-called "hyfrication" — may produce an acceptible cosmetic result, inasmuch as the grossly pigmented portion of the mole is removed — but the silent, major portion remains in situ. Over the period of many years, it may become aggravated by virtue of its natural development, or by surface trauma, or by the very scar produced by the original procedure. Recently, a white female, age 56, who had had a mole "burned off" forty years ago, noticed a mild soreness and faint redness of only 2 weeks' duration, around the small scar marking the site of the original lesion. Excision of this area showed not only persistent nevus cells, but their massive transition into the cells of an extensive malignant melanoma. Since then, metastatic nests have been found outside of the original area. Advanced malignant melanoma, one of the greatest tragedies at any age, cannot be cured today. Therefore, we must prevent it by the most adequate means at our disposal. The apparent increase in the incidence of malignant melanomas deserves our sober consideration. The problem of the benign mole is not a cosmetic one, as has been supposed. It is a problem in minor surgery, with the judicious use of the scalpel, and the microscopic verification of the total lesion by an experienced pathologist.

In conclusion, all of us are grateful to Dr. Block for providing us with a most interesting and challenging paper.

Fungus Fallacies

Exposure to pathogenic fungi in swimming pools, shower stalls, bathrooms, etc, does *not* cause fungous disease in normal feet.* Rather, "decreased resistance of the skin of the human host with a resultant activation of the pathogenic fungi, previously lying dormant as opportunists on the patients' own feet . . . is usually responsible for such attacks."

Forty-five subjects, whose feet were free of fungous disease, were exposed to foot bath water either freshly obtained from proved sufferers of active fungous infection or experimentally contaminated from laboratory cultures of fungi. *Not one of the subjects developed fungous disease* during a six week period of observation. Regardless of massive exposure to fungi, there appeared to be no association between subsequent microscopic findings of fungi on the feet and any tendency to develop clinically active fungous infection. The authors* note that "our experimental results support the previously available strong clinical evidence favoring the theory that acute attacks of fungous infections of the feet are usually due to a flare-up of a pre-existing latent, clinically or mycologically often not detectable infection. Contagion appears to play a minor or negligible role in causing clinically active, *e.g.*, acute attacks of fungous infection of the feet."*

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Medicine in the Koran

In this unique monograph, Dr. Gordon culls the Koran for its medical references. No great religious work is as little known to Americans as the Koran. Neither the Old nor the New Testament suffer from the comparison.

Little is known of Arabian learning prior to the sixth century, beyond the fact that under Emperor Trajan (A. D. 53-117) there existed a Roman province in Arabia through which a certain amount of western learning filtered to the Arabian people. During the fourth century there was a migration of the Nestorians from Syria to Edessa and of Jews to the suburbs of Mecca and to other cities of Arabia. Among the migrants were skilled physicians whose tenets were based on Greek learning. However, prior to the seventh century Arabia had not produced a single personality of scholarly attainment. Apparently foreign scholars did not make much impression on the native Arabians.

The healing of the sick was the province of the holyman who claimed to know the ways of the gods. Folklore and magic played an important role in curing disease. Christianity had just begun to penetrate the larger towns and prosperous Jewish settlements had been established through the influence of the Byzantine government north of Mecca. Before Mohammed, the Bedouins were pagan and polytheistic. The first Arabic school to take a definite monotheistic stand was the Hanifite. This school, to which Mohammed was converted, vigorously opposed paganism. It rejected all polytheistic beliefs. The Hanifites grew into a large cult. Under their influence, the deities to whom the pagans appealed in disease and misfortune lost their prestige. Losing faith in their gods, the people turned to their wisemen for help in sickness. Thus trained lay healers from the Byzantine Empire, Persia and India came to Arabia and were consulted in case of sickness. Superstitious medical practices were not completely abandoned, however. Doctors yielded to the spirit of the times and did recommend charms and amulets in connection with their "natural" remedies.

At this period, a prominent Arabian physician, a contemporary of Mohammed, El Harith ben Kalada, from el-Taif, appeared on the scene. He was a student of the Academy of Jondisabur, Persia. Before he returned to Mecca he traveled through India in search of medical knowledge. Upon his return, he spread the Hippocratic lore among his countrymen. Some medical ideas in the Koran have been traced to El Harith.

The Koran is primarily a religious code and not a medical work. It touches upon medical subjects only indirectly and then only from the viewpoint of a layman.

Hygiene and prophylaxis in the Koran are not as scientifically contrived and well rooted as their counterparts in the Old Testament. The medical subjects treated in the Koran are not on a par with those of the Talmud (which system was written about 100 years before the appearance of the Koran).[1] Yet the Koran did serve as an instrument for improving the health of the Arabic people.

Under hygiene may be included the methods of disposal of the dead. In tropical and subtropical climates, dead bodies have to be disposed of promptly for decomposition proceeds at a rapid rate. Prompt burial was the most frequent method. Cremation was, at times, employed. In some cases the dead were disposed

of by throwing them in a box into deep water. Criminals were left for the vultures: "Then the birds will eat from his head."[3] The Koran here refers to the baker of Pharaoh whose dreams were interpreted by Joseph.[4] Also, hygienic directions are given with reference to clothing, dwelling-places, sleep, cleanliness of the skin, selection of food and drink, bodily care and attention to the sick.

Anatomy was a defunct science to the Arabs in the days of Mohammed. The Koran says little of bodily structure. When it does, Mohammed's grave ignorance of anatomy is manifest. He apparently gave credence in the Koran to the idea that the trachea terminates in the heart. Evidently the Koran was influenced by the ancient concept that the *pneuma* supplies the body with life, and reaches the heart, "the organ of life," via the nostrils and the trachea. The heart was thought to be the seat of the soul and at death the soul was thought to return to Allah by the reverse route: *i.e.*, from the heart to the trachea to the nostrils.[7] Yet the prophet seems to have had some knowledge of the large blood vessels near the heart: "And then we would have certainly cut his vein near the heart."[8]

What has been said of the poverty of Koranic anatomy applies even more to physiology. Every human motion and sensation is controlled by Allah. The Koran discussed physiologic functions only to extol the wonders of Allah. When discussing the origin of milk, the Koran states, "We give a drink out of what is in their insides from betwixt the contents of the blood." To this the commentators add: "The coarse elements of food pass out through the kidneys and rectum and the more delicate ones turn into milk and the finest into blood."

EMBRYOLOGY

THE Koran marvels over the process of procreation. Two versions of the mechanism of fecundation are presented: One is to the effect that "We have created man of the mingling seeds of both sexes."[9] The other harks back to a theory popular in the days of Aristotle: "We formerly created man of a finer sort of clay (referring to Adam); afterwards we placed him in the form of seed in a sure receptacle (the womb); afterwards we made the seed coagulated blood and we formed the coagulated blood into a piece of flesh (clot); then we formed the piece of flesh into bones (skeleton) and we clothed these bones with flesh (muscles); then we produced the same by another creation."[10]

It was thus assumed that the male furnishes the seminal fluid and that the woman's share in the process of fecundation was merely that of an incubator. The male germ mixes with the blood of the female in the uterus where it forms a clot which gradually changes into flesh, which in turn ossifies to form a skeleton, and finally the bones are covered with muscles to complete the formation of the new body. "And after birth God perfected him and breathed into him of his spirit and gave him hearing, sight and heart."[11] The only organs mentioned in the Koran are the ears, eyes, and heart. The last was considered the seat of the soul and the organ of understanding.[12]

The Koran repeats the ancient idea that seminal fluid arises from the head, reaching the testicles after transit through the spinal column, "He made man out of liquid poured forth coming out between the back bone and the breast bone."[13] This idea is also in the Talmud.[14]

The Koran repeats several times the observation that man originates from a "repulsive drop." "Have we not created you of a repulsive drop of seed which we placed in a sure depository until the fixed time of delivery?"[15] An expression used in the *Dicta of the Fathers* reads: "Reflect upon three things and thou wilt not fall prey to sin: Know whence thou comest—from a repulsive drop; and whither thou goest—to a place of decay . . . "[16]

The Koran directs mothers to nurse their babies for two years: "And the mothers suckle their children for two complete years."[19] In the case of those who wish to complete their period of suckling, "it is the duty of the father of the child to feed them (*i.e.* the mothers) and clothe them with fairness."[20] If both parents " . . . desire to wean the child by mutual consent or counsel there is no blame on them."[21]

The Koran, referring to the child Moses,

whom Pharaoh's daughter found in a box floating in the Nile, presents the following version: "And we had already forbidden the Egyptian wet nurse to nurse him (Moses); then she (his sister, Miriam) said, 'I shall point out to you the people of a family who will take charge of him.' "[23] Thus, Moses, lest his purity be polluted, was not permitted to suckle from an Egyptian wet nurse. The same version of this legend is also found in the Talmud.[24]

Under the Koran, if a man wants to separate from a pregnant or suckling woman he is obliged to wait two years after childbirth until the provided time for lactation is over. During this period it is the duty of the father to house, feed and clothe the mother. When a divorced wife has intentions of remarrying, she must wait an additional three months (besides the four month period prior to divorce). According to the Koran: "If the four monthly periods passed and they are divorced, the divorced woman still waits three monthly periods."[37] In other words, it must be certain that she is not pregnant when she marries again. "The woman whose husband did not come close to her may be divorced at once."[38]

"Widows must wait three months and ten days before they can wed."[40] The ten days longer wait for widows is out of respect for their deceased husbands. The purpose of this is to allow time for a pregnancy to be noted, so there will be no doubt as to the paternity of the child. According to Jhel-al-Eddin, pregnant women are anxious to deny their pregnancy to their future husband so that they can rear their already conceived children with those of their second husbands as full sisters and brothers.[41]

The Koran's reference to the fact that those who have never menstruated need not wait three months to rewed, alludes to the marriage of young children which is not a rare phenomenon in the East where fathers commonly marry off their daughters at a tender age to rich men.

Cohabitation with menstruating women is forbidden in the Koran: "Avoid women during the menses and approach them not until they are in a state of purity."[42]

The following *sura* of the Koran shows that cohabitation was considered a religious act. "Your wives are a tilth for you; then come to your tilth as you please and send forward good for your souls and reverence for Allah and know you are going to meet Him."[43] Pilgrims to Mecca were prohibited from sexual intercourse on purely religious grounds.[44] However such was permitted during the fast days.[45] The Koran does not go as far as the Old Testament which prohibits even touching a woman during her menses.[46]

The Levitical regulations regarding menstruating and lying-in women, while in accordance with hygienic principles, are traceable to earlier primitive practices. Fear of menstrual blood among Semitic races appears to have been deeply rooted, as seen in Genesis: 31:35. Laban, searching for his missing *teraphim,* feared to approach Rachel's camel in the saddle of which they were concealed, when he was told by his daughter that "the manner of women is upon me."

To the primitive philosopher, menstrual discharge consisted of defiled spirits or unclean demons which had entered the body and whose escape through the monthly flow might injure those who were in contact with the woman. All kinds of precautions were taken against close proximity with a menstruating woman. She was secluded from society until the imaginary danger had passed. The very touch of her eating vessels and garments were taboo. Not until she submitted to rites of purification was she free to mingle with her family and neighbors.

Paracelsus asserted that the devil constructed spiders, fleas, caterpillars, and all other insects that infest the air and earth, from menstrual blood. This superstition today is largely confined to primitive peoples. Bushmen of South Africa hold that if a man glances in a girl's eyes during her menstruation, he will become stupified. Certain tribes of South Africa say that their cattle die if their milk is drunk by menstruating women. Among many North American Indians, women retire from the village during the time of their periods and live in special huts. They strictly abstain from all intercourse with men, who fear them just as if they were stricken with the plague. Native Australian women are forbidden to touch anything that men use and even to walk on paths

that are frequented by men. In Uganda, utensils which a woman touches during her menses are destroyed. The Bribri Indian women of Costa Rica use banana leaves instead of plates for food when they have their monthly flow and these they bury in the ground when they are done lest some animals eat them and waste away or perish.[48]

Mohammed frequently expressed opposition to the heathen Arabs who killed newborn girls because of shame at being known as "fathers of girls": "And when any one of them is given the tidings of (the birth) . . . 'a female,' his face becomes black and he is full of grief; he conceals himself from his people on account of the evil of what he has been informed . . . ; accepting the disgrace and shame, he buries her alive."[51] At times, because of poverty, pre-Islamic Arabs even slaughtered their newborn sons.[52] With reference to infanticide, Mohammed followed the precepts of the Hanifites who condemned the murder of all children regardless of sex.[53] The Koran also prohibits suicide.[54]

ETIOLOGY OF DISEASE

All disease, according to the Koran is theurgic.* Allah is the cause of all causes and therefore the cause of all disease. Consequently the only effective remedy against disease is to obtain forgiveness from Allah. There are, therefore, few physical remedies mentioned in the Koran. The idea that malignant spirits cause disease and ill luck was prevalent among all peoples of the Middle East.

Possession by disease-demons (*madschunun* in Arabic) is another cause of disease. "Most surely your messenger who has been sent to you is a possessed man."[61] "Either he is forced to be against God or he is possessed."[62] "He is but a possessed man; therefore bear with him for a time."[63] Also, the evil eye could produce sickness. All that was needed was a look "from the evil one when he envies."[64]

Witchcraft is mentioned in the Koran as a cause of disease: "But they are lost and made to get hold of the paths."[68] The Arabic word *marhur* is used for "they are lost" and indicates that the persons referred to have been bewitched.

Some diseases are ascribed to emotional conditions such as anxiety, fright, and worry. "Jacob's eyes became dim from worry."[70] The Book of Psalms gives a similar cause for dimness of vision: "My eyes are dimmed because of vexation."[71] "Allow not your life to pass by with sighs and worry." "Therefore let not thy lives run off their account with regrets."[72] "Sarah cried out and stroked her hand on her face when she was told that she would have a manchild."[73] The Koran comments that fear caused her heart to palpitate and her skin to wrinkle.

Death after the imbibing of water is mentioned in the Koran as well as in the Old Testament. Such instances, of course, can presently be explained on a rational basis. Many of the wells and streams in the Middle East have been and are contaminated. Concerning Saul (David, in the Old Testament version), the Koran states: "When Saul marched out with his forces, he said, 'Surely God is going to test you by means of a stream; . . . whoever drinks of it is not of me and whoever does not partake of it is of me; but if he takes with his hand a handful . . . (it matters not)'!" The followers of Saul who did not drink the water felt confident that they could vanquish Goliath and his house.[76] Perhaps the relatively large volumes of water drawn from the depths by the enemy were badly contaminated and not potable, and the relatively small handfuls of surface water were insufficient to poison the Israelites.

PSYCHIATRIC DISORDERS

The Arabs were well acquainted with epilepsy, hysteria and psychoses. According to some biographers, the Prophet himself was afflicted with such maladies and he suffered from attacks which lasted from hours to several months at a time. During acute episodes, his symptoms included twitching of muscles, movements of the lips and tongue as if he wanted to taste something, rotating of the eyeballs, shaking of the head sideways, a stuporous expression, facial pallor, copious perspiration, and

*Theurgic means of divine origin or cause. Until I looked in the dictionary, I didn't know what it meant either.—Editor.

violent headache, but there was no unconciousness.

Since there was no impairment of consciousness, this could not have been grand mal. The motor phenomena would seem to rule out petit mal. Perhaps this was a psychomotor epilepsy or a hysterical manifestation. The latter is not inconsistent with the tradition that during or immediately after his paroxysms, Mohammed dictated portions of the Koran.

A thorough evaluation of Mohammed's behavior pattern seems to indicate that he was a paranoid individual who had expanding delusions and hallucinations.

THERAPY

THE therapy of the Koran, as must be expected, is of a theurgic* character. God is the healer: "Then when I am sick He heals me." "God created for every disease a remedy." Honey was considered a remedy for many ailments. It is produced "from the inside of a bee in which there is healing for mankind." Honey was widely used as a dietary supplement and as a remedy.

According to the Koran, when Jacob's eyes became blurred his son Joseph sent him a sherd (perhaps to be used as a compress about the eye) "and he was cured." In the Old Testament no such story is found. In the Koran, when Jonah was thrown on the land by the whale, God cast him on a desert island where he became sick. God then caused the gourd plant to grow near him.[82] The large leaves of this plant were to protect Jonah from the sun.

The dependence of Mohammed upon his teachers and upon what he had heard of the Jewish Hagaddah and Jewish practice is now generally conceded. The subject was first treated by David Mill in his *Oratio Inauguralis de Mohammedanismo*.[83]

Gastfreund [84] attempted in his *Mohammed Nach Talmud und Midrasch* to show the parallels between Hebrew and Mohammedan literature. This has received extensive treatment by H. Hirschfield in *Jewish Elements in The Koran* (1678).

The Koran belongs to the dawn of human re-enlightenment. It abounds in good moral suggestions and precepts. Thus Mohammed, or those who spoke for him, if they failed to ignite the torch of learning they at least set the stage for the dawn of a new civilization in Arabia.

The most important health measure of the Koran is rest. The Koran made it mandatory to utilize the night for rest only. "He also made a night for you that you may rest therein, and . . . for no other purpose." "Honor God for the long rest."

The New Testament speaks of the "water of life." [89] Holy water for purification of persons is still used by the Church. Among the Arabs, water was used as a purifier before prayer and was used to cleanse persons contaminated by coming in contact with menstruating women, leprous persons, or bodies of deceased individuals. Water is still recognized as the most vital element in maintaining life. Pure, fresh water was and still is difficult to obtain in tropical climates, and was naturally considered a life-sustaining substance possessing marvelous powers to revive the lives of animals and plants.

Among the attributes of the Paradise which Mohammed promises to believers is the presence of an abundance of fresh water: "There are rivers of water which does not become noxious." [90] The Koran describes Paradise as " . . . a garden beneath which flows rivers." [91] Mohammed promises believers water that does not get spoiled [92] but unbelievers get a " . . . drink of boiling water and a painful agony." [93]

Camphor water appears to have been relished in Mohammed's time: "Surely the virtuous shall drink of a cup tempered with camphor." [94] Although the Koran forbids alcoholic drinks, wines are frequently extolled as sparkling fluids only second to water: "And out of the fruits of palms and grapes there are those which you use for making intoxicants." [95] Possibly, reference is here made to grape and date brandy. Wine was commonly mixed with plain water or ginger water to circumvent the prohibition of wine in the Koran.[96]

MILK

MILK is frequently mentioned in the Koran as a drink.[104] Presumably sheep, goats, cows and camels were all used. Mohammed consid-

ered milk as a fluid, the characteristics of which were midway between chyle and the blood. El Harith ben Kalada, his contemporary, wrote: "And most certainly there is a lesson for you in the cattle who give you a drink out of what is in the inside from betwixt the contents of the bowels and the blood—pure milk delicious to those who drink." Elsewhere the Koran asserts: "It is a substance midway between the food and the blood." [105] The commentators add this: "The coarse part of the food passes out through defecation and urination. The finer part of the food turns into milk. The finest turns into blood." This comparison of milk with blood and the origin of both liquids occupied the attention of early physiologists. According to Avicenna both blood and milk are derived from the chyle. Blood is manufactured from the chyle in the liver, and milk is made from the chyle, in the mammary glands. In the liver the chyle which has a milky hue, turns red, and this in turn is restored to white in the breast.[106]

The food that God prepared for the helpless newborn infant after its separation from the womb was naturally looked upon with great admiration. Mothers felt religiously bound to nurse their babies for at least two years, partly out of reverence for this marvelous substance in their breasts.

Milk thus was accorded a special place in the Koran: "It is a fluid reserved for the believers in Paradise." "It will be imbibed in Paradise like water." [107]

CIRCUMCISION

No reference to surgery is found in the Koran. Even circumcision, an old religious ceremony practiced among the Arabs, is not mentioned. Mohammed took this rite so much for granted that he felt there was no need to mention it. The laws the Prophet laid down in the Koran were largely intended to prevent abuses. The Arabs never violated the circumcision rite and considered it just as important and commonplace as cutting the umbilical cord at childbirth. Circumcision is the oldest religious surgery known.

Arabs practiced circumcision long before the time of Mohammed. According to the Old Testament, Ishmael, the progenitor of the Arab race, was circumcised at the age of 13. Mohammed himself is supposed to have said: "Circumcision is an ordinance for men and honorable for women." The Abyssinians practiced female circumcision but it is not clear whether the operation was performed on the labia or over the clitoris. In Arabia the profession of female circumcision expert (*resectricis nymphrum*) was as popular an occupation as that of engaging in cock castration or caponization. It is related by Abulfeda that when Islam came close to a crushing defeat in the Battle of Ohod, Hamze, the Uncle of the Prophet, cried out to the chief of the enemy: "Come on, thou son of a she-circumcisor!"

But whatever the origin of circumcision among the Egyptians and other races might have been, the avowed purpose of the operation among the Hebrews is to serve as a blood covenant, as reflected in Genesis: "This is My Covenant, which ye shall keep between Me and thee, and thy seed after thee; every man-child among you shall be circumcised. And ye shall circumcise the flesh of your foreskin; and it shall be a token of the covenant betwixt Me and thee."[108]

Christianity early abolished the practice of circumcision. But some Christian sects went out of their way to celebrate this practice to an extent never dreamed of by Jews and Mohammedans. Early Christians celebrated the Feast of Circumcision without resorting to the operation. But the detached prepuce was greatly venerated.

Interesting from a medical point of view is the legend of the seven sleepers who, according to the Koran, slept in a cave for 309 years.[109] God had them change their positions from one side to the other.[110] This seems to imply that it was known that individuals who reclined too long in one position are subject to sicknesses such as hypostatic pneumonia and decubitus.

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A bibliography and listing of 110 *citations appears in Dr. Gordon's reprints.*

Rita S. Finkler, M.D.
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The Endocrine Glands in Dermatology*

Physiologic alterations in the skin, connected with the menopause, adolescence and pregnancy; endocrine factors in dermatology; and the relations of all this to the stress syndrome are here compactly presented. The paper itself was originally illustrated by 30 slides, each depicting an endocrine dermopathy.

Most modern clinicians are familiar with the effects of pathologic changes in the skin and its appendages, arising from endocrine disturbances. Indeed, some of the most obvious manifestations of these disturbances were observed in ancient times as seen in sculptures, paintings and vivid descriptions in the literature.

The pale, yellowish skin and absence of facial and body hair of eunuchs and eunuchoids, was well known. Cretins and cretinoids were featured in many famous paintings with their characteristic short stature and their puffy, yellowish skin.

The actual connection between skin changes and diseases of the endocrine glands was first demonstrated by Addison in 1855 (just 100 years ago) when he described the bronzing and the pigmentation of the skin associated with adrenal gland disease.

Pierre-Marie, in 1886, described the relationship of a pituitary tumor to acromegaly with the characteristic skin hypertrophy. In 1871, Lorain detailed a syndrome connected with pituitary deficiency with stunted growth, a delicate child-like skin and other abnormalities which are now recognized as Lorain-Levy syndrome.

The modern clinician suspects a pituitary tumor not only by the acromegalic facies but also by the hypertrophy and coarseness of the skin, edema, hypertrichosis and acneiform eruptions. These skin manifestations are due to secondary adrenal-cortical hyperactivity. Primary adrenal hyperplasia or tumor will also result in skin hypertrophy, hypertrichosis, acne and characteristic purplish stria on the breasts, abdomen and thighs. Administration of cortisone for therapeutic purposes in large doses will also cause these skin changes.

With the development of chemical and biochemical technics, greater precision in diagnosis has become possible. Not only the type, but also the degree of the disturbance present can be estimated.

In suspected hypothyroidism with dermatologic disturbances of follicular keratitis, alopecia, yellowish and edematous skin, certain laboratory tests are usually carried out. The metabolic rate is not sufficient, as it might be low in other hypometabolic states, such as, deficiency in pituitary, adrenal or gonadal functions. Measurement of serum cholesterol is of considerable help but high cholesterol values do not always indicate a hypothyroid state. High cholesterol values are present in hypertension, diabetes, liver disease and nephrosis. High serum cholesterol may also be of a con-

*Presented before the Section on Dermatology, 189th Annual Meeting of The Medical Society of New Jersey, Atlantic City, May 18, 1955.

genital or familial nature. Estimates of serum protein bound iodine and the radio-active iodine uptake constitute a more accurate evaluation of the thyroid function.

In adrenal disturbances, measurement of the 17-keto-steroids and corticoids, the glucose and insulin tolerance tests, I.V.P. and trans-sacral pneumography and skeletal x-rays for osteoporosis help in the differential diagnosis between primary adrenal pathology and adrenal disturbances secondary to pituitary hyperfunction.

ANDROGENIC hormones tend to cause hypertrophy of the sebaceous glands of the skin and an increase in growth of facial and body hair. At adolescence there is a marked increase in adrenal cortical and gonadal activity with increased production of sex hormones, both estrogens and androgens. The occasional imbalance of these hormones, chiefly an excess in androgen secretion, may cause adolescent acne in both males and females.

The relative proportion of the circulating hormones is only one of the factors affecting the skin. The other, and perhaps a more important factor is the sensitivity of the skin and its appendages to androgenic hormone.

In an individual with a skin structure highly receptive to androgenic hormone stimulation, a normal amount of circulating hormone may produce acne, hyper-keratosis and an increase in hair growth. On the other hand an increased androgen-estrogen ratio may not disturb a less sensitive skin. The same holds true in hyperkeratosis of menopause — only a small proportion of women develop keratoderma of the palms and soles of the feet at the climacteric in response to the increased androgen-estrogen ratio. Decreased estrogen production in menopause frequently causes degenerative changes in the skin and mucuous membranes, such as dermatosis, atrophic and hypertrophic vulvovaginitis and leukoplakia. These changes frequently respond to topical estrogen therapy.

Estrogen therapy is also used successfully in adolescent acne and in some cases of alopecia. In eunuchs, eunuchoids and castrates the administration of androgens improves skin texture, pigmentation and vascularization.

In pregnancy definite skin changes are observed, such as hyper-keratosis, seborrhea and dandruff, increased hairiness, hypertrophy of the sweat and sebaceous glands, water retention and fat deposits. These changes are due to increased pituitary and adrenal activity and an increase in circulating estrogens and gonadotropins secreted by the placenta. Many patients with alopecia find that the condition improves during pregnancy; with the termination of pregnancy, however, the original disturbance recurs.

The modern concept of stress, which affects all glands of internal secretion and all body tissues including the skin has thrown a new light on the etiology of many diseases and skin manifestations. Selye has shown that a variety of stress agents, thermal, chemical, emotional, or bacterial, causes a profound disturbance in the organism by way of the pituitary-adrenal axis.

The organism strives to make compensatory adjustments to these noxious agents. Persistence of stress eventually precipitates a breakdown in the adjustment of the organism and results in various diseases of adaptation, such as: hypertension, cardio-vascular diseases, diabetes, rheumatoid arthritis, nephritis, gastrointestinal ulcers, Addison's disease, Simmond's disease, Cushing's syndrome and various skin diseases.

The mechanism which causes these disturbances has been demonstrated by animal experimentation and clinical observations in Dr. Selye's Institute over a period of 15 years and opens a new era in our understanding of the diseases of modern civilization.

The theory of stress, adaptation-syndrome and the manifestations of diseases of adaptation cannot be discussed further within the limited scope of this presentation.

Skin manifestations in diseases of the liver, pancreas and the parathyroid glands have not been included in this paper.

35 Leslie Street

Martin H. Wortzel, M.D.
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A New Buffered Skin Cleanser

An invisible mantle of acid protects the skin against bacteria. Dr. Wortzel reports on a new benzyl-propyl Paraben® emulsion to be used as a cleanser that protects this acid mantle.

The pH of normal skin has long been an intriguing subject, and many papers have been published linking the change in pH with skin disorders. Thus Marchionini[1] showed that values for pH were within the acid range in atopic lesions. In eczematous dermatoses that commonly affect the hands, there is either a very slight acidity or a strong alkalinity. It is generally agreed that the normal pH varies from 4.0 to 6.6 on various portions of the body surfaces.[2] Liquid soapless skin cleansers commonly used by dermatologists have pH's varying from 4.5 to 6.8—all of them are well on the acid side.[3]

I have had the occasion to work with a new sudsing soapless cleanser that has a novel and important qualification. Known as Aci-Derma, it is an inert aqueous emulsion containing .2 per cent each of benzyl and propyl-parahydroxy benzoate in a specially prepared vehicle of glyceryl monostearate, cetyl alcohol and propyline glycol that has been buffered to a pH between 2 and 3. A pH between 2 and 3 was chosen because laboratory studies show that pathogenic bacteria will not grow *in vitro* at a pH lower than 4, and that pathogenic fungi will not grow at a pH lower than 3. Present research has also shown that a preparation with a pH of 2 is non-irritating to tissue (mice skin testing[4,8]). The thought was that an acid preparation, actively buffered to a low acidity, would keep the pH level constant when applied to the skin and would help to restore the normal buffer action of the skin more quickly.

By the use of glass electrodes, Jacobi and Hernich[5] found that when they used acid and alkali cleansing creams to each side of the face, the pH after application and removal was practically the same as that of untreated skin. However, when they used acid and an acid *buffered* cleansing cream, they found that the area, the site of application of the buffered cream, returned to normal pH more quickly. The detergent I used has the designation of Aci-Derma.[6] It was found to be bacteriostatic (according to the agar plate method), having a 3 millimeter zone against Staphylococcus aureus and a 10 millimeter zone against Tricophyton interdigitale. It combines with an equal volume of horse serum[7] with no significant change of pH. It has been fully studied on mice and found to be innocuous and without sensitizing property.[8]

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1. Marchionini, A.: Arkive fur Dermatologie, 163:18. (January 1931)

2. Ormsby, O. S., and Montgomery, H.: *Diseases of the Skin,* Lea and Febiger 1954.

3. Klauder, J. V., and Gross, B. A.: Archives of Dermatology and Syphilology, 63:23. (January 1951)

4. Fogg, L. C.: Personal communication to the author.

5. Jacobi, O., and Hernich, H.: Drug and Cosmetic Industry Journal, 75:34 (July 1954)

6. Registration applied for by I. E. Princer Pharmaceuticals, Newark, N. J.

7. Iannarone, M.: Rutgers University College of Pharmacy, personal communication to the author.

I have used this soapless cleanser on 243 private patients. All were instructed to apply the lotion to areas of normal skin as well as to the site of dermatitis. These patients were of both sexes, and ranged in age from 3 months to 62 years. It has been applied to almost every area of human skin. In no instance have I observed evidence of cutaneous irritation. All patients were satisfied with the lotion, and expressed a desire to continue it.

In 46 cooperative patients, I used matched pairs. I applied a commonly used acid skin cleanser to one area of the body, and Aci-Derma[6] lotion to the symmetric area. All other medications used were applied equally. In 24 of these patients the areas to which the Aci-Derma[6] was applied responded more readily. The series included nine women who have recovered from chronic eczematous contact-type dermatitis of the hands, and have kept these hands free from any evidence of dermatitis for at least nine months. This is the first time that any of these women have been free from this skin disorder since its initial onset. The only medication used by any of them was Aci-Derma[6] lotion as a cleanser instead of soap or one of the other soapless detergents. This has no statistical value, but is presented as an interesting result that is more than just coincidence.

Marchionini[1] stressed the importance of perspiration and its component acids as a factor in producing the "Acid Nature" of the skin surface. He insisted that, "Bacteria seemed to thrive in areas that were not acid, and that these areas had skin disorders that were different from those encountered on usually acid skin regions." He coined the term *physiologic acid mantle*, which he said protects the skin and body "like a protective mantle against the inroads of bacteria, fungi, alkalies, and their external influences."[1] The term "acid mantle" was very descriptive and has endured to this day.

Many workers[1,3,9,10] have attempted to correlate the role of perspiration, amino acids, carbon dioxide diffusion and so forth in neutralization and in the buffering action of the acid mantle. Gradually, the idea of an acid pH of the skin surface has changed to a concept of an "acid nature" which is the result of a protective sebum layer that is buffered on the acid side. Both the acid mantle and the skin itself are truly buffered: they neutralize alkali as well as acid.[11] This important buffering capacity of the skin is associated with the amphoteric nature of the free amino acids, bicarbonates, protein degradation products, and ammonium salts.

Jacobi and Hernich,[5] using the local application of test papers, have performed intriguing experiments which show how weakly buffered acid and alkali creams more quickly restore the local pH value to normal. "The acid mantle of the skin is the first line of the body's defense against external influences. However, mere acidity is not enough. Buffer capacity is more important. It is not uncommon to find a skin of low pH with poor buffer capacity, and then again, a skin of relatively high pH with a strong buffer capacity."[5]

SUMMARY

A NEW sudsing detergent helps restore the "acid mantle" of the skin. One constantly seeks this restoration in treating most skin diseases encountered in every day dermatology. This weakly buffered lotion more quickly restores the "acid mantle" and, thereby, supplements the buffering capacity of the skin. It is a valuable addition to routine dermatologic therapy.

ACKNOWLEDGMENT

Dr. Bart M. James of Newark has been kind enough to work with me and has supplied 100 of his private patients for trial of this product. Aci-Derma lotion was supplied by I. E. Princer Pharmaceuticals, Newark, N. J.

8. McSweeney, E. S., Jr.: Personal communication to the author.

9. Schmid, M.: *Dermatologica*, 104:367 (1952)

10. Levin, O., and Silvers: Archives of Dermatology and Syphilology, 25:825 (June 1932)

11. Schippli, R.: *Dermatologica*, 98:295 (1949)

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Recent Trends in the Tuberculosis Sanatorium Field in New Jersey

Although chemotherapy and other measures have dramatically improved the treatment of tuberculosis, there is as much need for the sanatorium as ever. Lest the public lessen its support for this essential institution, the following thought-provoking article is presented.

RECENT medical advances have greatly influenced the care of the population generally, but have had a special impact upon the treatment of various forms of lung disorders. Thus a report [1] from the American College of Chest Physicians says:

"It has been apparent to all in recent months that the specific anti-tuberculosis drugs together with excisional lung surgery were expediting discharges from institutional care . . . The discovery of so many minimal and early moderately advanced cases by x-ray surveying methods has perhaps given impetus to a renewed practice of home treatment rather than institutional care.

"Certainly, the advent of streptomycin and the antimicrobials which have subsequently come into the picture have done little to discourage domestic treatment of the tuberculous patient in the hand of the family doctor regardless of how highly we ourselves value a course of observation and instruction in a well-run tuberculosis hospital."

Recent news of the closing of tuberculosis sanatoria in isolated instances, and the report of vacant beds in some, has given rise to the idea that there is now less need of direct sanatorium care in the treatment of the tuberculous patient.

Against this, a note of caution is expressed by the Committee on Therapy [2] of the American Trudeau Society:

"There appears to be no doubt that antimicrobial therapy has materially shortened the period of recovery in the average case of tuberculosis, and that it has greatly decreased the case mortality rate. This does not necessarily imply, however, that it has altered the indications for rest therapy during the active phases of the illness.

"The studies which are in progress to determine to what extent bed rest may be safely dispensed with, or in what categories or stages of the disease it may play an unimportant role in therapy, will require a long period of study. Until these studies are completed, the clinician will be well advised to adhere to the established indications for bed care."

Statistics compiled in past years by the Bureau of Social Research of the New Jersey State Department of Institutions and Agencies, and published [3] in a series of *Research Bulletins*, have reflected current changes in the sanatorium care of the tuberculous.

The present article brings the available information up-to-date and is designed especially to mirror the effects of the medical ad-

*Chief, Bureau of Social Research, New Jersey State Department of Institutions and Agencies.

1. *The Hospital Counsellor* published by the Council on Hospitals, American College of Chest Physicians—Number 5, September, 1954.

2. The American Review of Tuberculosis, June, 1954.

3. For further details see "The Changing Scene in the Tuberculosis Sanatorium Field in New Jersey—A Graphic Chart Book—Department Research Bulletin Number 117" and "The Sanatorium in the Tuberculosis Program in New Jersey," Public Health News, New Jersey State Department of Health, April, 1954.

vances in recent years upon the tuberculous patients in the sanatoria of New Jersey.

In Table 1 are summarized the main movements of the patients in the fourteen state and county sanatoria in selected years.

TABLE 1. AVERAGE POPULATION, ADMISSIONS, DISCHARGES, AND DEATHS

Selected Years 1930 - 1954

Fiscal year	Average Daily Resident Population	Total Admissions	Total Discharges Alive	Total Deaths
1930	1957	3316	2266	831
1935	2416	3284	2327	803
1940	2902	3192	2314	908
1945	2389	2723	1982	899
1950	2630	3319	2595	731
1954	2489	3586	3149	517

It will be noted that the high point in the sanatorium patient population was reached in 1940, declined during the next five-year period encompassing the war years, increasing again at the close of the war to 1950, with somewhat of a decline from 1950 to 1954. In 1954, the number of sanatorium admissions as well as the "discharges alive" have been the highest in twenty-five years. Deaths in the sanatoria show a continuous decline since 1945 and reached the lowest point in 1954.

So many factors influence the early recovery of patients in tuberculosis sanatoria that it is difficult to isolate the effectiveness of recent medical technics as contrasted with the more conventional therapeutic methods. Specialists are now exploring this more thoroughly.

We here offer a rough and ready index of the greater celerity with which patients are discharged from sanatoria. This is expressed as "patient turnover," that is the rate of total admissions and "discharges-alive" per patient in the sanatorium at the beginning of the fiscal year:

Fiscal Year	Patient Turnover
1940	1.87
1945	1.89
1950	2.26
1954	2.66

Another index of the beneficial effects of the present-day medical treatment in New Jersey sanatoria is the definite decline in the death rate of patients in the sanatoria. See Table 2.

TABLE 2. DEATH RATES BY SEX

Selected Years 1940 - 1954

Fiscal year	Death Rate per 100 Under Treatment	
	Male	Female
1940	18.3	12.6
1945	21.1	13.8
1950	14.2	9.9
1954	9.6	6.0

The real significance in the admission figures of patients to tuberculosis sanatoria is found in the over-all trend in first admissions in the two main diagnostic categories: tuberculous and non-tuberculous. Table 3 clearly shows this.

TABLE 3. TUBERCULOUS AND NON-TUBERCULOUS FIRST ADMISSIONS

Selected Years 1930 - 1954

Fiscal year	Number	Per cent of these	
		Tuberculous	Non-Tuberculous
1930	2525	96.3%	3.7%
1935	2198	91.2	8.8
1940	2217	88.9	11.1
1945	1923	88.5	11.5
1950	2261	75.7	24.3
1954	2325	74.3	25.7

Chief diagnoses among the non-tuberculous patients include carcinoma of the lung, bronchial asthma, non-specific pneumonitis, bronchopneumonia, pulmonary fibrosis, and other pulmonary malignancies.

The literature of tuberculosis shows increasing concern with the problem of lung cancer. Cancer of the lung has shown an alarming increase during the past twenty-five years. Male lung cancer incidence in the United States went up six-fold. Among women the increase in cancer incidence was two-fold.

In a recent paper [4] it was pointed out that "carcinoma of the lung, which comprises 5 per cent of all malignancies, is definitely on the increase. In most cases, about three months will elapse before a patient seeks medical attention. The physician loses seven months, on the average, before a definite diagnosis is established. Ten years ago the average delay was eleven months. Today, with early diagnosis,

4. Advisory Committee on Cancer Control, The Medical Society of New Jersey and New Jersey Society of Clinical Pathologists.

the cure rate can be high if pneumonectomy is performed early."

It is important to note that there has been a decided shift in the age distribution of first admissions of patients with pulmonary tuberculosis in recent years as is evidenced by the figures in Table 4.

TABLE 4. AGE DISTRIBUTION AND SEX OF PULMONARY FIRST ADMISSIONS

1935 - 1954

	Males		Females	
Age	1935	1954	1935	1954
Under 25 years	21.5%	8.3%	42.3%	24.5%
25 to 44 years	47.5	34.5	47.0	49.9
45 to 64 years	28.8	41.2	9.3	16.1
65 years of age and over	2.2	16.0	1.4	9.5

Studying related figures on the tuberculosis death rate of different age groups among policy-holders of the Metropolitan Life Insurance Company, Dr. Louis I. Dublin concludes that the tuberculosis problem is being concentrated to an increasing degree at the older ages. This trend he thinks will be accentuated in the future as the proportion of elders in our population continues to rise. He feels that the value of mass x-ray campaigns will be greatly enhanced if special effort is made to bring older persons into their operations. This will help to reveal the existence of many unrecognized and innocent spreaders of tubercle bacilli, and to speed protection for their families and their co-workers. Effective case finding and more adequate care of the tuberculous in our older population will give great impetus to the eradication of the disease.

Adequate hospital facilities for the tuberculous have a direct bearing on the number of lives being saved. The tuberculosis sanatorium has been able to take advantage of the continuous advances made in medical and surgical treatment and in adapting its program to meet the special needs of the increasing number of non-tuberculous patients. The tuberculosis sanatorium will continue to occupy an important place in the combating of tuberculosis.

It is necessary that the sanatorium continue to receive adequate community support, that it be given every encouragement to go on with its curative work, as well as to explore measures which will act as effective health restoratives of patients suffering from tuberculosis and lead toward the discovery of new measures of tuberculosis control.

135 West Hanover Street

Normal Hematuria in Normal Football Players

Boone and Haltwinger, writing in the August 27 (1955) J.A.M.A. say that if a doctor lets parents worry him into benching every football player who developed hematuria he'd end up benching the whole team.

Hematuria may normally accompany the strenuous exertion of football. Many players have it some time during the season. Each year doctors are caught between parents who want their son benched and fans who want their star player back. Researchers making a survey of 37 university varsity football players during the 1954 season found no reason to bench players who developed hematuria.

The disorder appeared in all the players, but cleared with rest. The rapidity with which it cleared was remarkable.

Even six players who had bleeding sufficient to discolor the urine, reverted to "football normal" within three to four days.

The first signs of hematuria were found during the preseason conditioning exercises. There was a moderate increase in its occurrence at the beginning of body contact drills.

After each Saturday game, there was a peak in the number of players with hematuria, but that number usually dropped by the following Wednesday. The postgame rate remained about the same throughout the season, the authors said.

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Measles and the Central Nervous System*

Though generally thought of as a harmless disorder, measles can present neurologic or psychiatric complications of considerable seriousness. Dr. Kuvin details two cases of transverse myelitis following measles, one of which led to persistent character changes in the child.

A DIAGNOSIS of measles should alert the physician to possible involvement of the brain, meninges or spinal cord. The frequency of this complication varies greatly in different epidemics. It may be so mild and transient as to go unnoticed.[1] There appears to be no parallel between the severity of measles and the central nervous system involvement.

Onset is usually abrupt, the complication appearing between the third and sixth day of the rash. There is high fever. The patient frequently is irritable and uncooperative. Other signs and symptoms vary with the structures involved, and may be classified as follows:

1. *Encephalitis.* In addition to irritability and lack of cooperation, the patient may become drowsy, disoriented, stuporous, or even comatose. Nausea and vomiting are common. The pupils are dilated, and nystagmus, intention tremor, and scanning speech may be present.

2. *Meningitis.* Here the child commonly complains of headache and stiff neck. Kernig's and Brudzinski's signs may be elicited.

3. *Myelitis.* Several spinal syndromes may take the form of transverse, disseminated, or ascending myelitis. Flaccid paraparesis is not uncommon, although any muscle group may be involved. Tendon reflexes frequently disappear, followed by sensory losses.

The spinal fluid pressure is usually elevated, and there are 50 to 100 cells, mostly mononuclears. Sugar and chloride are normal. Protein levels may be somewhat elevated.

TREATMENT

THERAPY is primarily supportive.[2] Nutrition and hydration may be difficult to maintain because of the mental disturbances, the nausea and the vomiting. The patient may have to be restrained and given intravenous or gavage feedings. Prophylactic measures should be instituted to prevent muscle wasting, contractures, and decubitus ulcers in the paretic or paralytic patient. Antibiotic or chemotherapy will combat secondary infection.

Odessky[3] recommends that gamma globulin be given as soon as central nervous system involvement is noted. This is administered intramuscularly. The dose is one cubic centimeter per pound of body weight, divided over a period of 36 to 48 hours. He feels that the prognosis for recovery is thus greatly improved. However, treatment must be started at the very onset of central nervous system disease. Therapy given later is of questionable value.

*From Essex County Isolation Hospital, Belleville, N. J.

1. Pullen, R. L.: Communicable Diseases, Philadelphia, Lea and Febiger, 1950, pp. 83-87.
2. Nelson, W. E.: Textbook of Pediatrics, Philadelphia, Saunders, 1954, pp. 539-541.
3. Odessky, L., *et al.*: Journal of Pediatrics 43:536, November, 1953.

Signs and symptoms usually subside within two or three days. The emotional changes may persist for weeks or months. Ford [4] gives the death rate as about 10 per cent. About half of those who survive have permanent residual damage. This most commonly is in the form of flaccid or spastic paraplegia, cerebellar ataxia, or mental retardation and personality changes.

CASE ONE

An 8-year old girl was admitted to Essex County Isolation Hospital 5 days after the onset of a measles rash. She had drowsiness and loss of appetite. The patient complained of generalized headache, and had vomited twice on the day of admission. Temperature was 104. She had a subsiding measles rash. The pupils were 3 mm. in diameter. She had lateral nystagmus bilaterally. Her throat was inflamed. There was some yellowish exudate on the faucial tonsils. Nuchal rigidity, Brudzinski's, and Kernig's signs were present. The bladder was visibly distended, and palpable to the umbilicus. There was a marked flaccid paraparesis. The deep tendon reflexes were hypotonic, and the superficial reflexes were absent.

Spinal fluid examination showed 98 cells per cubic millimeter. All of them were lymphocytes. Sugar was 50 milligrams, and protein 97. Pressure was 120 millimeters water.

The patient was very irritable and uncooperative. She vomited many times. Intravenous therapy was needed to maintain nutrition and hydration. Penicillin was given because of the secondary throat infection. Aspirin helped control the fever. A Foley catheter was inserted to relieve the urinary retention. Her paresis became worse, and by th third hospital day, the deep tendon reflexes of the legs were absent. On the fourth day, she had almost total sensory loss over both lower extremities. Passive physiotherapy was started at this time. On the seventh day the patient began to improve. She was discharged on the sixteenth hospital day. There was no residual sensory or motor loss; however, her asocial manner persisted. This emotional change was noted by her parents.

CASE TWO

A 7-year old girl entered Essex County Isolation Hospital five days after the appearance of a measles rash. She had a high fever for one day prior to admission, and was very drowsy and irritable. On admission she was unable to move her legs.

Her temperature was 103. A subsiding measles rash was present. Nuchal rigidity, Brudzinski's and Kernig's signs were elicited. Finger to nose test showed a mild ataxia. The abdominal reflex, and knee and ankle jerks were absent bilaterally. Plantar reflexes were normal.

A spinal fluid examination showed 76 cells per cubic millimeter, 80 per cent of which were lymphocytes. Protein was 63 and sugar 50. The pressure was 145 millimeters of water.

She was given intravenous fluids, aspirin, penicillin, and passive physiotherapy. She began to improve on the second hospital day, and was discharged on the eighteenth hospital day as recovered. There was no residual paresis, sensory loss, or mental change. She was pleasant and cheerful when she went home.

COMMENT

THE two case reports illustrate characteristic symptoms and physical findings of measles meningoencephalomyelitis. Both patients developed transverse myelitic syndromes which subsequently cleared. Personality changes in the first patient persisted. The prognosis for complete emotional recovery is not good, since mental changes are not as likely to subside as are physical ones. These children frequently become chronic behavior problems, resistant to all forms of therapy.

4. Ford, F. R.: Diseases of the Nervous System in Infancy, Childhood, and Adolescence, Springfield, Charles C. Thomas, 1952, pp. 616-622.

231 Nye Avenue

Breast-Feeding and Gastro-Enteritis

In the *Lancet* (1:994, 1954), C. A. Ross and E. A. Dawes report on gastro-enteritis in infants. Breast-fed infants, they find, are relatively resistant to gastro-enteritis. A possible explanation is that the low intestinal pH in such children is unfavorable for growth of enteric organisms. Oral feedings of lactose had only a partial and temporary effect in reducing the pH of feces of artificially-fed infants. Human milk seems to contain another factor necessary for the maintenance of an acid intestinal pH and a lactobacillary flora.

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Physiologic Therapy in Psychiatry*

In this veritable cyclopedia of somatic therapics, Dr. Impastato tells what electronic and photic methods can do in psychiatric cases; and he spells out how to do it. Here is a compact postgraduate course in one phase of treatment in psychiatry.

In accepting a patient for treatment, it is my aim to treat him as safely as I can in the shortest possible time. To decide what type of treatment the patient should be given, he is first subjected to a thorough physical, neurologic and psychiatric examination. Then the following are considered:

1. Diagnosis.
2. Prognosis.
3. Physical condition of the patient: age, nutrition, infirmities, *et cetera.*
4. Psychiatric status, as: negativistic, uncooperative, disturbed, delirious, refusal of food, destructive, suicidal, assaultive, and so on.
5. Antisocial trends, if any.
6. Reliability of the patient and relatives.
7. Attitude of the patient and relatives towards treatment.
8. Attitude of the patient and relatives towards hospitalization.
9. Existent exigencies.
10. Therapeutic weapons available.
11. Financial means.

The available therapeutic modalities fall into two broad categories: those depending essentially on psychological or emotional technics; and those which, essentially, utilize the body's physiologic processes. In the first category are individual psychotherapy, group psychotherapy, and, to a large extent, narcosynthesis.

In the "non-psychologic" classification may be placed four rubrics: drugs, hormones, shock therapies, and all others. Drugs include sedatives, tranquilizers, anticholinergics, stimulants, vitamins, antihistaminics, and certain specifics—as for instance, penicillin for syphilis. Hormones include ACTH, thyroid, progesterone, and sex hormones. The shock therapy classification includes the three conventional modalities: insulin, electric shock and metrazol. Also to be included is carbon dioxide treatment and acetyl choline.

In the miscellaneous classification I would place pyrotherapy, prolonged sleep, photic stimulation, and the non-shock intensities of insulin, metrazol, carbon dioxide and electricity.

This list reflects the wide range of modalities available to the imaginative psychiatrist. Admittedly it is an incomplete list, but I present it because it is the spectrum of procedures with which I am personally familiar.

There is a strong emotional or, if you choose, psychic component in any treatment situation, even if the therapy seems to be essentially "somatic." This is reflected by the remark of a young psychiatrist who, referring to his very able chief, said, "Gee, we treat the same kind of patients the same way: but the old man gets much better results than we do."

In this paper, I will concentrate on photic stimulation and electric shock therapies; and make mention of succinyl choline induced metrazol convulsions.

*Read by invitation to the Section on Neuropsychiatry at the Annual Meeting of The Medical Society of New Jersey on April 20, 1955, in Atlantic City.

PHOTIC STIMULATION

CLINICIANS of the 19th century had been alerted to the possible relationship of the visual pathways to epilepsy by experiences with patients who suffered attacks as the result of playing cards, riding by a sunlit avenue of trees and by other visual stimuli. The invention of the electroencephalograph and the recording of brain potentials showed that this relationship was true. Berger, at the beginning of this century, noted a change in the brain waves when the subject closed or opened his eyes. Later, with the application of the stroboscopic light or flicker, greater electroencephalographic changes and even epileptic attacks in susceptible persons were noted. These findings led to the development of "photic driving" to increase cerebral excitability and activate a certain number of apparently negative electroencephalographic responses among epileptics. More recently Gastaut [1] and his co-workers using metrazol; and Ulett [2] and his collaborators using Azozol®, have used photic stimulation to produce therapeutic convulsions. This technic makes it possible to use a smaller dosage of the convulsant drug and to produce a milder seizure with less apprehension than when the drug is given alone. Locascio,[3] Pacella,[4] Lovett-Doust [5] and others have applied photic stimulation without producing convulsions, as a therapeutic agent in psychiatric disorders.

A PHOTIC stimulator is simply a bulb which can be flashed at various frequencies from one per second to 35 or more per second. The therapeutic range of flicker seems to lie between 3 and 17 flashes per second. Treatment may be given with or without premedication. I have routinely premedicated patients with 250 milligrams of amyl ethyl barbituric acid* intravenously just prior to the application of the flicker. The patient on a comfortable couch is given the injection. The flicker is placed within one inch of his closed eyes and turned on. (I used the Dalters Research Corporation stimulator. The technic is not the same for all stimulators.) The patient is instructed to keep his eyes closed and not to have any thoughts at all while under the flicker. I allow the flicker to flash for from 10 to 15 minutes. Others use it for longer or shorter time. Usually the patient falls asleep. He may continue to sleep for one-half to three hours or more. On awakening he feels refreshed, relaxed and free from worry. This relaxed state usually lasts the rest of the day. The treatment is pleasant. The patient looks forward to getting it. Treatment should be given daily for best effects. I have given it two to four times a week with moderate success. Improvement usually sets in within ten treatments. A series of from ten to twenty treatments is the usual course.

WITH this method we have treated recurrent depressions, reactive depressions and mild psychoneuroses. We have also treated a number of involutional depressions and paranoid patients who were poor physical risks. The "much improved" rate was about 25 per cent. This is a modest figure, but when we consider that most of these patients would have had to undergo electroshock therapy if the photic stimulator were not available, the value of the procedure becomes obvious.

Pacella [4] found photic stimulation of value in hypomanic states. Lovett-Doust,[5] using stimulation without barbiturate and for periods up to one hour, obtained remissions in 35 per cent of schizophrenics and 50 per cent of depressions. These findings need corroboration.

The manner by which photic stimulation exerts its beneficial effects is not known. According to Gastaut,[1] the flicker stimulates the lateral geniculate bodies, the diencephalon and the cortex *via* fibers issuing from the thalamus. Lovett-Doust and Schneider,[5] who have worked with spectroscopic oximetry as a monitor, found that photic stimulation at certain frequencies (1 to 8 and 2 to 17 per second) caused progressive anoxemia. When the stimulation stopped, a rebound phenomenon carrying the oxygen tension beyond the resting level occurred. They noticed disappearance of delusions and hallucinations with increased oxygen tension. Rhythmic stimulation may also

*Eli Lilly and Company tradename amyl ethyl barbituric acid under the proprietary designation of Amytal.

be applied *via* auditory or sensory pathways. The amyl ethyl barbituric acid* and the psychotherapeutic treatment situation play a part in the results. Amyl ethyl barbituric acid* alone is usually ineffective. The consistent quick results (one to four weeks) argue against a purely psychotherapeutic effect. Photic stimulation apparently causes a stress reaction which forces the body economy to mobilize its physiologic reserve. When the stress is removed there occurs a rebound to a higher level of physiologic activity than existed before the stress. This higher level of physiologic activity is perhaps the major beneficial effect of photic stimulation. Similar physiologic changes occur in electroshock and insulin therapy as has been shown by Funkenstein *et al.*[21]

The advantages of photic stimulation may be summarized as follows:

1. Safe: no complications.
2. Easy to apply: simple technic.
3. Pleasant to the patient.
4. Inexpensive.
5. Can be applied to all patients after the preliminary examination without having to wait for spinal x-rays or electrocardiograms.
6. Excellent for ambulatory or office practice.
7. Can be given by trained personnel.

ELECTROSHOCK THERAPY

ELECTROSHOCK therapy includes a number of modalities, some of which have specific indications. The following list is not complete. It represents technics I am presently using.

I. Convulsive Therapies:

1. Orthodox convulsion.
2. Focal unilateral convulsion.
3. Focal spread convulsion.
4. Monopolar convulsion.

II. Nonconvulsive Therapies: Here are included:

1. Myoclonic nonconvulsive therapy.
2. Tonic nonconvulsive therapy.
3. Electric sleep therapy.
4. Electric barbiturate sleep therapy.

III. Combined Convulsive and Nonconvulsive Therapy.

The convulsive and other responses to an electric stimulus depend on the number of cortical neurones stimulated within the path of the current and the intensity and rate of administration of the current. Other factors such as convulsive threshold and drugs which raise or lower the threshold are also operative. These we will not discuss at this time.

With the classic electroshock machine of Cerletti-Bini, delivering ordinary household sinusoidal alternating current of 120 volts and 60 cycles per second given for 1/10 to 5/10 of a second, with the electrodes placed one on each temple, and with the current passing from one frontal lobe to the other, a violent supramaximal convulsion, which appears to follow the "all or none" law, is usually produced. This supramaximal convulsion is caused by an excessively high dose of electricity striking a large segment of the brain within a short time. The overpowering stimulus produces an excessive transitory disorganization of the brain giving rise to excessive apnea, confusion and memory disturbances; and causing an unduly powerful and long-lasting convulsion 45 to 60 seconds, often accompanied by boney, (20 per cent), muscular and other complications.

SOON after the introduction of electroshock in 1938, this supramaximal convulsion was found to be very effective therapeutically; 70 to 80 per cent of manic-depressive psychoses, involutional psychoses, senile depressions and acute psychoses, irrespective of the type or etiology, apparently recovered or were conspicuously improved. These results have been so impressive that they have made it difficult for some of us to accept treatment modifications which have been proposed to reduce the high incidence of complications caused by the alternating current treatment. Early attempts to use nonconvulsive, alternating current stimulation yielded poor results. This led to the misconception that nonconvulsive treatment is useless and dangerous; that it causes prolonged apnea and confusion. Our experience with alternating current nonconvulsive therapy shows that good results are possible and that the apnea and confusion encountered were less than

that seen following convulsive alternating current treatment.

Introduction of unidirectional currents and technics designed so as to produce a gentle, less disorganizing convulsion, was met and still is met with resistance by some who say that the results with these currents are inferior to those obtained with the alternating current. Some of these investigators deplore the fact that so little confusion is caused by unidirectional currents. They think that confusion is necessary for good results. The widespread use of unidirectional currents by psychiatrists both in private practice and hospitals refutes this opinion.

When we first used unidirectional currents we aimed for a gentler convulsion with the hope of reducing the incidence of fractures. Some psychiatrists think that convulsions follow the "all or none" rule. They then argue that a "gentle convulsion" is a contradiction in terms. With unidirectional currents we can produce not only generalized convulsions of various intensity but can produce convulsions limited to one part of the body.[8] It is obvious from this that all convulsions do not follow the "all or none" law. They are dependent on the amount of cerebral tissue stimulated and the intensity and duration of the stimulus.

Alternating current, as originally used, was not adaptable to produce gentler convulsions. The technic of administering the current for a fraction of a second did not allow the proper administration to produce mild convulsions. The Reiter amplitude modulated unidirectional currents have been found excellent for producing gentle currents of various intensities.

THE REITER CURRENTS

THE Reiter amplitude-modulated unidirectional current consists of groups of 30 volleys per second. Each volley is made up of about a dozen waves. When the current selector switch is at position 1, the waves have a relatively flat top; at position 5, the bursts resemble thin spikes. The intermediate positions have thicker spikes. The spikes in position 5 may at times go as high as 1600 milliamperes but last only a microsecond or less. The spikes in each volley vary in height. Some are only 1/10 the size of the highest spikes. Average of the peaks in the volley may be about half of the value of the highest spike.

It is more difficult to produce a convulsion with relatively flat tops of the current in position 1. Hence, this is used for nonconvulsive treatment.

The Reiter current can be regulated manually to alter the intensity at will. This makes it possible to administer any desired intensity of current for as long as needed. This, in turn, permits control of one of the factors producing the convulsion, namely the intensity and duration of the current. The other factor, (the amount of cerebral tissue stimulated) is controlled by placing two electrodes at different positions on the head. When the electrodes are placed bitemporally, a seizure can be produced in most patients within 3 to 15 seconds with 10 to 20 milliamperes of average current (5 to 10 volts). This convulsion consists of three distinct phases:

1. Muscular twitchings of the face and limbs in phase with the stimulating current, due to cortical neuronal stimulation. This phase lasts from 3 to 15 seconds or longer. The twitchings get stronger as the current is raised until the self-propagated convulsion is triggered.

2. The convulsion begins with the tonic phase. This is signalled by a stretch of the body musculature and cessation or marked reduction of the cortical twitchings.

3. After 5 to 15 seconds the tonic phase is followed by the clonic phase which lasts from 10 to 15 seconds. The entire treatment from the beginning of stimulation to the end of the clonic phase lasts around 45 seconds.

With the alternating current the patient appears to go into the convulsion at once. However, if the seizure is closely observed there is, as soon as the button is pressed, a sudden flexion of the torso and limbs which is followed by the tonic phase. The flexion is caused by cortical neuronal stimulation. It is the counterpart of the Reiter convulsion phase one. Inasmuch as 5 to 15 seconds are required to trigger the convulsion with the Reiter technic, the convulsion is necessarily a threshold convulsion as it becomes triggered only when the convulsive threshold is reached. These convulsions are milder and shorter than alternating

current supramaximal fits and result in a much lessened incidence of fractures (1 to 5 per cent). Since the convulsions are mild the patient can be managed by only one assistant instead of the 3 or 4 required to hold down the patient in an alternating current paroxysm. Other advantages of the threshold convulsion are that apnea, confusion and memory changes are all greatly reduced.

By a fortunate circumstance, I altered the usual technic of turning off the current once the convulsion had started, and instead reduced the current to about one-half of its convulsive level. I kept it on until towards the end of the clonic phase, when I gradually reduced it to zero. This technic gave us a few more advantages: the incidence of apnea was further reduced, as a small amount of current towards the end of the convulsion stimulates the respiration; the vigorous movements of the clonic phase were suppressed by the continued cortical neuronal stimulation; the mouth was kept closed by the maintained contraction of the masseters, thus avoiding the epileptic cry and at the same time the mouthpiece was made unnecessary, as the tightly closed jaw prevents the tongue from being bitten.

REITER technics have not been generally adopted because in some patients, a few more treatments are required with it, than with the alternating current. When the hazards of the severe complications with alternating current are compared with those of a few more Reiter treatments, the advantages, I believe, are with the latter. Since memory is very little impaired[9] with the Reiter technic, multiple treatments are possible.[10] This is done by following a treatment, within a minute or two, with another. The second treatment is not given unless the patient shows some degree of return of consciousness as measured by a motor or vocal response to a few milliamperes of current. If a third treatment is necessary, I usually give it one-half to one hour later. With these multiple treatments it is possible to shorten the disability period and restore the patient in less time than it would usually take with alternating current. With these qualifications, the results with the Reiter apparatus are better than those with alternating currents. They are accomplished with less risk and less memory disturbance. Many of the patients are returned to usefulness much sooner than the AC† treated patients. Treatment with the Reiter apparatus shows that confusion is not necessary to achieve results.

UNILATERAL FOCAL SEIZURES

IN ATTEMPTS to lower the risks of electroshock therapy, especially with patients in poor physical condition (such as fragile bone structure, fractures, postoperative patients, pregnancy or poor cardiac function) the technic of focal unilateral convulsion was recently developed.[8] This begins with anesthetizing the patient to a level where he does not respond, by evidence of pain, to a current of 3 milliamperes ("Depth of Anesthesia" test.[11]). The electrodes, spaced a few inches apart, are placed on the mid-head, on one side, half way between the top of the head and the ear. The current is turned on and raised gradually. With 1 to 3 milliamperes, the facial muscles on the side of the electrodes are seen to twitch, due to stimulation of the trigeminal and facial nerves. With 3 to 5 milliamperes the fingers of the opposite hand twitch due to cortical stimulation. As the current is raised, the opposite lower limb begins to twitch. With further increase, the twitchings become more marked and muscle tone is conspicuously elevated. The tonus keeps increasing until the unilateral convulsion is triggered. Ten to twenty milliamperes over 10 to 15 seconds are required to do this. The convulsion, limited to one side, is not accompanied by the usual apnea, as the patient is breathing long before the end of the clonic phase. Effects on the blood pressure, and pulse are minimal; and on the memory, none. At the end of the convulsion, the patient is usually calm and fully oriented. During the convulsion, as the body twists to one side (never forward) compression fractures are practically eliminated. Therapeutic results are noted in from 6 to 20 treatments given 2

† AC: Alternating current.

to 4 times a week. Best results are achieved in recurrent and other mild depressions, and in acute psychoses in patients with a history of a well adjusted personality prior to the psychosis. Agitated depressions and chronic psychoses and psychoses in badly adjusted individuals, respond poorly to this technic. Focal unilateral convulsions are less effective than the generalized convulsion, when the entire patient population is considered. However, some patients show a remarkable response. This treatment has the decided advantage of putting the least stress of any convulsive therapy on the cardiovascular, respiratory and osseous systems.

FOCAL SPREAD CONVULSIONS

To increase the effectiveness of the focal unilateral convulsion, the so-called "focal spread convulsion" was developed.[7] This merely consists of allowing the convulsion to spread to the opposite side, once it has been produced on one side. The technic is the same as in the focal convulsion, except that once the convulsion has started on one side, the current is either maintained at that level, or raised until the ipsilateral limbs go into the convulsion. Treatments are given with the electrodes on one side of the head and within a few minutes, another treatment is given with the electrodes on the other side of the head. The indications are the same as in the orthodox seizure. The results closely approximate those of the bilateral convulsion. The advantages of the focal spread convulsions are marked reduction of fractures, and the much reduced stress on the cardiovascular system, the elimination of all restraints during the convulsion and marked reduction of confusion and agitation.

MONOPOLAR CONVULSION

Recently Joseph Epstein[12] introduced the monopolar convulsion. This is produced by placing one electrode slightly to the left of the midline near the middle of the head, and the other electrode, bracelet shaped, on the right forearm. The patient undergoes a strong convulsion, the effects of which are the same as in the bilateral convulsion. In view of the fact that the path of the current traverses the midline structure, including the diencephalon brain stem and reticular formation, it was hoped that perhaps better results would be achieved, at least in some patients, than with other convulsive methods. So far, this hope has not been fulfilled. The results appear to be the same as in the bilateral fit.

SUCCINYL CHOLINE MODIFICATIONS

In spite of the modifications available, the bilateral convulsion is still used in most patients, and many investigators still employ the old AC† machines. Fractures still occur. To lower the incidence of these fractures, a number of methods have been suggested to reduce the violence of the convulsion. These methods include hyperextension of the spine, intravenous barbiturates, a stimulus producing only a petit mal reaction prior to one producing a grand mal, curare drugs, decamethonium, gallamine, and most recently, succinyl choline dichloride (Anectine*). Of all these, succinyl choline (Anectine*) is the best method presently available to prevent fractures during electronic therapies. Anectine* is an excellent muscle paralysant. Essentially it consists of two molecules of acetyl choline. Its action is not definitely understood. It probably causes a persistent depolarization at the motor end plate as it is not affected by the true choline esterase which normally destroys acetyl choline. The depolarization lasts only a few minutes as the succinyl choline rediffuses into the blood stream where it is hydrolyzed by the serum pseudocholine esterase. Curare has a cumulative effect, so that it is not possible to give another dose the same day. Succinyl choline, on the other hand, can be given again within five minutes, as it is destroyed very quickly and has no cumulative effects. This is a great advantage when convulsive treatments have to be repeated in the same day.

*The Anectine® used in this investigation was kindly supplied to us by Dr. W. P. Colvin of Burroughs Wellcome & Co., Inc.

The dose of succinyl choline is best judged by the amount of paralysis desired and of the sensitivity of the patient to the drug. Usually cachectic patients, those with anemia or liver disease are sensitive to succinyl choline as their serum pseudocholine esterase is low. It is not practical to estimate the dose by the weight of the patient, or by his muscular build. Berg [13] and I feel that the best method to determine the exact dosage is to test the patient's sensitivity to a small dose of succinyl choline and then to determine the therapeutic dose on the test response. Our method is as follows:

It is carefully explained to the patient that a small amount of medicine is going to be given to him. He is told that he may have a feeling of tightness or mild pain in the throat but that these effects will last only about half a minute. He is assured that the physician will be at his side all the time during the test. He is now asked to grip the examiner's hand as hard as possible first with one hand and then with the other so that a good idea of the force of the patient's grip can be obtained. Five milligrams of succinyl choline are quickly given intravenously. Fibrillations are soon seen about the patient's mouth and he may complain of the symptoms mentioned above. He is now asked to grip the examiner's hand as tightly as possible and note is made of the motor loss. The effect on the respiration is also noted. The hand grip is tested every 10 seconds for a minute. The estimated dose for the amount of paralysis desired is calculated according to the greatest amount of weakness noted during this one minute test. The more Anectine* given, the greater the paralysis and the more severe the apnea.

In general, there are two schools of thought about succinyl choline. One believes in complete paralysis and consequently uses large doses (up to 80 milligrams). These large doses are usually accompanied by apnea lasting from 3 to 10 minutes, or longer. The other school (of which I am a member) believes that all that is necessary to accomplish our objective of reducing the fracture hazard, is to reduce the violence of the convulsion about 50 per cent. To accomplish this, small doses, from 5 to 15 milligrams of succinyl choline are needed. The apnea produced by these small doses is mild and of short duration. In patients who have pre-existent fractures, we are not afraid to administer large doses of succinyl choline to induce a full paralysis. We have used Anectine® in about 300 patients without having a single fracture. Our technic is as follows:

As soon as the patient's muscular power has returned fully following the 5 milligram test dose (this takes 2 or 3 minutes), the estimated dose of succinyl choline together with 1/75 of a grain of atropine and 50 to 75 milligrams of thiamylal or 100 to 150 mg. of thiopental are drawn in the same syringe, and quickly (within 10 seconds) injected intravenously. Thiamylal is tradenamed by Parke-Davis as Surital® and thiopental is tradenamed by Abbott as Pentothal®. The patient is given the electric treatment within 20 to 30 seconds of the end of the injection. Following the convulsion he is given oxygen under pressure with a resuscitator. We use the Mine Safety Appliance Company's "Demand Pneophore." According to the motor response obtained at the first treatment, the dose is subsequently either maintained, increased or decreased.

We have also used succinyl modification of the metrazol convulsion (which we are in the process of evaluating) in patients who do not respond to electric convulsive treatments. Our technic is as follows:

The patient is given the Anectine* barbiturate and atropine mixture in one syringe and within 10 to 20 seconds he is given, through the same needle, 10 to 15 cubic centimeters of metrazol injected quickly. The metrazol convulsion is greatly modified similar to the modification of the electric convulsion. Since metrazol is a respiratory stimulant, less apnea than with succinyl-modified electric convulsion is encountered.

NONCONVULSIVE TECHNICS

Some observers hold to the dictum, "No convulsion, no result." This is not true, as is proved by the favorable response to nonconvulsive therapy (NCT) by many patients.[14,15,16]

In all nonconvulsive technics the patient should be adequately anesthetized to prevent the current being felt and the development of anxiety. To anesthetize a patient for this purpose inject a cubic centimeter of thiopental, hexobarbital or thiamylal. The tradenames are Pentothal (Abbott), Evipal (Winthrop-Stearns) and Surital (Parke-Davis) respectively. Wait 20 seconds. If the patient is sensitive to the barbiturate, he will probably fall asleep. Should he show hardly any effect, he is asked to count while doses of a cubic centimeter at a time are quickly injected every 20 seconds until he stops counting. At this point, the Reiter current is turned on and very slowly raised. If the patient is not asleep he will

wince, cry or move his arms. In that case, the current is immediately shut off, another cubic centimeter is injected, and the test repeated 20 seconds later. When the patient is able to withstand 3 milliamperes of current without showing signs of pain, he is adequately anesthetized.[11]

Myoclonic nonconvulsive therapy is the mildest form of NCT. It is given to patients who are in the poorest physical condition, such as cardiacs and advanced hypertensives; and to psychoneurotics. It is also used when combined convulsive - nonconvulsive treatment is administered. The technic follows:

The patient is anesthetized, the current is turned on and raised to 3 or 4 milliamperes, but not high enough to stop his breathing. He will be seen to twitch about the face and perhaps the upper limbs. The current is reduced by a half milliampere a minute until the patient shows signs of awakening. At that time, treatment is stopped. Duration of the treatment is from 2 to 5 minutes and it is given 2 or 3 times a week. If properly done, following the treatment the patient usually goes to sleep for a variable time and awakens in a relaxed, calm manner. If the patient feels the current, he will often have a crying spell or some other abreaction at the end of the treatment. The cry is not consciously motivated. Often the patient has no recollection of having cried. However, if the patient recalls the unpleasant sensations of the current, he will develop anxiety and refuse further treatment.

ABREACTIVE TECHNIC

Myoclonic nonconvulsive therapy is an excellent medium for the production of abreactive states [16a] in any psychiatric condition in which this is indicated. The technic is to anesthetize the patient in the usual way and to stimulate him with 3 milliamperes. Instead of reducing the current, as in the myoclonic treatment, it is kept at 3 milliamperes steadily for from 3 to 5 minutes and continued for a minute or so after the patient shows signs of awakening. When the current is finally cut, the patient usually has a loud abreactive crying spell at which time incisive questioning will be rewarded by rich material.

COMBINED TREATMENT

Myoclonic NCT is used at the end of the usual convulsive treatment (and after the patient has begun to breathe). The current is kept at 3 milliamperes and gradually reduced by a half milliampere every 30 seconds until he shows signs of awakening, at which time the current is cut. When the Reiter apparatus is used correctly, little confusion occurs. In those patients in which it does occur, it is due to the patient's special susceptibility to confusion. Most of the patients who become confused are over middle age. In many of these, the confusion is probably the expression of early brain changes in the form of arteriosclerosis or some other pathologic entity. In others, it is due to a low convulsive threshold. Sometimes, it is the expression of an acute anxiety reaction as the result of the treatment. Regardless of the etiology, confusion may be overcome by inducing the convulsion very slowly over a period of from 20 to 30 seconds or longer while keeping the amperage as low as possible, that is to 10 to 15 milliamperes.

The mode of action of nonconvulsive therapy in overcoming confusion is not known. A possible explantion is that the patient is made to sleep by the NCT and that during this sleep he is gradually recovering from his confusion. If patients are routinely anesthetized prior to convulsive treatment, confusion is rarely encountered because most patients sleep for a variable time after the convulsive treatment.

BARBITURATE COMA

Barbiturate coma [18] is probably the best indication for nonconvulsive therapy. The treatment of barbiturate coma is greatly simplified by NCT, which in most patients, obviates the use of oxygen, intubation and suction. These are not needed as the NCT by increasing the respiration, ventilates the patient sufficiently and the contraction of the muscles about the mouth constantly force the saliva outward. Nonconvulsive therapy also obviates the use of drugs such as caffeine, amphetamine, and picrotoxin which themselves may be injurious to the patient.

The manner in which nonconvulsive theraapy helps to overcome barbiturate coma is not

known. One of the mechanisms might be that by causing pain, it reflexly awakens the patient and increases his metabolic rate. With this there is an increased respiratory response as well as increase in the blood pressure and other vital functions and a quicker destruction and elimination of the barbiturate. The placement of the electrodes is of great importance in barbiturate coma. Electrodes must be at a position at which the best respiratory responses are obtained. Most of us place the electrodes at the lateral-frontal area, at about the hair line. One recent experiment, however, suggests that a better position might be the face, just in front of the ears. In this position, less current is needed to stimulate respiration. In any event, once the electrodes have been applied, the modulation should be at "low" position. Current is then turned on and raised until a visible effect on respirations is noted. Take care not to raise the current beyond a point where respirations stop. Usually 4 or 5 milliamperes are sufficient. Sometimes a half milliampere will suffice. As soon as the current starts flowing, there will—typically—be a noticeable deepening and a regularity in the respiration plus an increase in blood pressure and in the strength of the pulse together with an improvement in the color of the patient. Stimulation is continued until the patient either awakens or is breathing adequately. The treatment is continuous except for periods of 5 minutes every half hour or so, during which time the patient's physical condition is assessed. General medical care should precede and accompany nonconvulsive therapy. Such measures as gastric lavage, intravenous fluid, antibiotics, oxygen if needed, should be immediately instituted.

Using this technic, Hawkins and collaborators [19] recently reported that in a series of 20 barbiturate coma patients, 19 responded to nonconvulsive therapy receiving from 30 minutes to 228 hours of stimulation.

TONIC NONCONVULSIVE

THIS modality is a severer type of treatment and is used in patients who are candidates for standard nonconvulsive therapy but whose physical condition is better than those receiving myoclonic nonconvulsive therapy. Results with this modality are better than those with the myoclonic treatment. I have found it especially effective in a few patients with involutional paranoid conditions, especially those suffering from ideas of infidelity. It is also effective in recurrent and other mild depressions. It is a treatment of choice in psychoneurosis as an adjunct to psychotherapy.

The technic is to raise the current gradually from zero to 10 milliamperes. This amount usually causes suppression of respiration, twitching of the muscles of the face and upper limbs and an increase of the tonus of the entire body. Actually what is seen is the first phase (see above) of the convulsive seizure. Care should be exercised to see that the patient is not "triggered" into a paroxysm. He is kept in this condition for 30 seconds at which time the current is lowered to a level which allows him to breathe freely (1 to 5 milliamperes) and allowed to breathe for 30 seconds. This process is repeated two other times. The whole treatment last 2½ minutes.

Tonic nonconvulsive therapy can also be used to initiate breathing when apnea occurs following convulsive treatment. Here the technic is to give the patient a sudden burst of current raising it from zero to 10 milliamperes and lowering it back to zero in a second or so. This is repeated every 30 seconds or so, until the patient starts to breathe.

In all nonconvulsive therapy either 2 or 4 electrodes are used. The rationale of the 4 electrodes is that the current issuing from the electrodes covers a greater area of the brain and by so doing might stimulate the part of the brain structure which is responsible for the patient's response to the treatment. The position for barbiturate coma has already been described. In other nonconvulsive therapy, when two electrodes are used, they are placed parietally over the ears. When 4 electrodes are used, they are placed about 4 inches apart, 2 in front and 2 behind the ears.

RESULTS WITH NONCONVULSIVE THERAPY

CATEGORICAL statements regarding results with nonconvulsive therapy cannot be made and there is no definite way to predict whether a patient will or will not respond to noncon-

vulsive therapy. In general we say that patients with "mild" psychoses, psychoneurotics and involutional paranoid states are more responsive to this form of treatment than all those with other conditions. When nonconvulsive therapy is given to patients so selected, roughly about 50 per cent of them show a response to it. Treatments are usually given 2 to 4 times a week. Daily treatments would give better results. Patients who respond usually begin to get better after 5 to 6 treatments. The usual course is 10 to 20 treatments.

The indications given are only relative. If after a certain number of treatments the patient does not respond to one modality, he should be shifted to another. At times, although a certain number of treatments has apparently not benefited the patient, his quick recovery following a few treatments of another modality indicates that the previous treatments were not all together ineffective and that they had probably laid the ground work for the quick response of the patient to the final few treatments.

ELECTRIC SLEEP

DEEP coma nonconvulsive therapy may prove to be the treatment of choice in chronic schizophrenics and acute schizophrenics who do not respond to electric convulsive therapy. Banay [20] uses it to make the patient amenable to analytic therapy in paranoid schizophrenics. It is hoped that this may replace insulin. The usual type of deep coma treatment may be better designated as electrical sleep therapy, as in this form of treatment no barbiturate is required. Two methods are used to induce electric sleep. One starts with a convulsive seizure. The doctor continues to administer the current for 8 to 15 minutes following the end of the seizure. The second method is to induce electric sleep without first producing a convulsion.

The technic of doing this, as well as the technic of continuing the electric sleep after an initial convulsion, is too complicated to be mastered by reading a description of it. The only way it can be learned is by a period of apprenticeship. Briefly, the patient is made unconscious with a current of from 5 to 10 milliamperes. As soon as he is unconscious, the current is reduced by one-half, and kept there as long as the patient shows no sign of awakening. When he does show signs of awakening, the current is doubled by pressing on the doubling button of the machine for 10 to 30 seconds at a time. This procedure is repeated when necessary, until the end of the treatment. If the patient should become cyanosed, the current is reduced and the electrodes are placed high on the forehead near the hair line, which is the same position used for treatment of barbiturate coma. During the treatment the electrodes are moved, in a slightly curved line, from the upper forehead near the hair line down to in front of the ear as far as the ear lobule and back again. During the treatment, the five different types of current in the instrument are utilized. Treatment should be ended in 8 to 12 minutes with the electrodes on the forehead and using current No. 1. At the end of the treatment, the patient usually sleeps for an indefinite time.

When the electrical sleep is preceded by a convulsion, it somewhat resembles electronarcosis. However, it differs from this in that the current used is different; the electrodes instead of being fixed bitemporally are moved about from the temples to in front of the ear lobule and back; and no mouthpiece, oxygen or suction is required.

ELECTRIC BARBITURATE SLEEP

RECENTLY, I have modified the technic of electrical sleep by anesthetizing the patient prior to the treatment and instead of using 5 different types of current on the Reiter machine, begin the treatment with current No. 5 and end it with current No. 1. Although the technic is very simple, it is learned only after observing or assisting in a number of treatments. The patient is anesthetized. Current No. 5 is used initially. The current is raised 5 to 6 milliamperes. This may stop respiration. If it does, it is reduced to a level at which the patient breathes. The current should be kept as high as possible without fully suppressing respiration. Care should be taken that no serious cyanosis occurs. If cyanosis does occur, the current should be reduced sufficiently to allow the patient to breathe freely. If the patient should show signs of premature awakening, the doubling button can be used to deepen the coma. The electrodes are gradually moved from the initial position above the frontal bosses near the hair line, down towards the ear lobule. It may be necessary to decrease the cur-

rent as the electrodes are moved downward, as the tolerance of the patient is decreased the further down we go. Once the electrodes are in front of the ear lobules, their direction is reversed and gradually brought back to the initial position. When this is reached, current No. 1 is used. This current is not as penetrating as current No. 5 and is soothing and does not disturb the patient. At the end of the treatment, the patient falls asleep; in many instances for 30 minutes or longer. The gist of the technic is to stimulate the patient with as high a current as possible from 8 to 10 minutes, taking care that the patient does not become cyanotic or too aware of the current. These two types of treatment are especially suited for schizophrenic and paranoid conditions. Electric sleep is the more profound treatment and may show better results; but many patients respond to electric barbiturate sleep and do not need the former. At this stage, it is not possible to give statistics and results. Banay [20] has achieved remarkable results with some of his patients. We have had some very good results with our modified technic.

CONCLUSIONS

THE psychiatrist has a well-stocked warehouse of physical and physiologic treatments. The appropriate treatment for the individual patient should be chosen after considering the history, the findings, and the diagnosis, taking in consideration the rule that the patient should be treated within the shortest period of time with the safest treatment available. The physician should be ready to shift from one treatment to another, when results are not forthcoming. In photic stimulation we have a safe treatment which yields results in a moderate number of psychiatric patients. Electroshock therapy is no longer a "one modality" push-button technic. A number of technics both convulsive and nonconvulsive have been described, all of which have some specific indication. To administer electroshock therapy properly, the physician should be skilled in the administration of barbiturates, muscle relaxants and other medicaments.

Good results are achieved by the alternating current and amplitude modulated unidirectional currents of Reiter. While it is possible to administer convulsive therapy only with the alternating current machines, convulsive and nonconvulsive therapy may be given with unidirectional machines. It is hoped that early results with the nonconvulsive electric sleep and barbiturate electric sleep therapies will be sustained, as this will greatly reduce the need of insulin coma treatment. Succinyl choline is a safe and excellent muscle relaxant which practically eliminates the fracture hazard in electroshock therapy.

40 Fifth Avenue

Bibliography will appear in author's reprints.

State Activities • • •

Memo from Blue Cross

The New Jersey Blue Cross Plan paid for hospital bills 91 cents of every premium dollar received by the Plan in 1954. More than $33,780,000 was paid to hospitals for services rendered 225,000 hospital patients.

Operating expenses of the Blue Cross Plan amounted to only 8 cents of the premium dollar.* The New Jersey Blue Cross Plan's total reserve fund amounted to $5,236,728 at the end of 1954, which is approximately $2.90 per person enrolled.

In insurance circles, this reserve is considered extremely modest. The ultimate security of Blue Cross, however, is in its relationship with the hospitals of the community, just as the economic security of the hospitals is bound up with that of Blue Cross.

The incidence of hospitalization, in terms of the number of hospital admissions per 1000 persons enrolled in Blue Cross has shown a sharp increase over the past five years. This factor was 95 in 1950; 102 in 1951; 111 in 1952; 109 in 1953; and in 1954 it shot up to 123 admissions per 1000 enrolled.

The average *per diem* costs of hospital care have also been steadily rising during this period; and, during the past two years, the average length of hospital stay among Plan Subscribers has shown a tendency to increase.

The rate of hospital admission, the *per diem* cost of hospital service, and the average length of hospital stay—these three factors are vital factors in control of subscription rates of Blue Cross. They cannot be controlled by Blue Cross, but they can—to a limited degree—be controlled by hospitals, physicians and their patients working together.

The physician is perhaps the key man in this picture, because it is he who decides when a patient should be hospitalized, what hospital services he requires, and when he may safely be discharged.

Blue Cross solicits the interest of physicians and earnestly requests their cooperation in safeguarding the future of our voluntary hospital and medical prepayment program.

*The other cent was added to reserve.

New Jersey Cancer Seminar

Under auspices of the American Cancer Society, New Jersey Division and the Special Committee on Cancer Control to The Medical Society of New Jersey the third Cancer Seminar will be held at Hotel President, Atlantic City, on Saturday and Sunday, November 19 and 20, 1955. An instructive program has been arranged by the Professional Information Committee of the New Jersey Division, of which Dr. Joseph I. Echikson is chairman. The program follows:

SATURDAY, NOVEMBER 19TH, 1955

12:30 p.m. *Dr. Joseph I. Echikson,* Newark. (Luncheon meeting). "The Cancer Control Program in New Jersey."

2:30 p.m. *Radio Therapy Treatment of Cancer of the Uterus*: Dr. Milford Schulz, Boston.

3:00 p.m. *Differential Diagnosis of Abnormal Uterine Bleeding*: Dr. John Y. Howson, Philadelphia.

3:30 p.m. *An Evaluation of the Lung Cancer Problem*: (A) *Diagnosis and Treatment*: Dr. John Pool, New York.

4:00 p.m. (B) *Directions in Lung Cancer Research*: Dr. Charles S. Cameron, New York.

4:30 p.m. *Clinical Investigative Trends in the Control of Leukemia and Lymphomata*: Dr. Alfred Gellhorn, New York.

SUNDAY, NOVEMBER 20TH, 1955

10:00 a.m. *Surgery vs. Radiotherapy in Breast Cancer*: Dr. Lauren V. Ackerman, Washington University, St. Louis, Mo.

10:30 a.m. *Hormone Control in Breast Cancer*: Dr. Olaf Pearson, New York.

11:00 a.m. *Analysis of Testicular Tumors*: Dr Frank Dixon, Pittsburgh.

11:30 a.m. *Cancer Detection in Rural Group Practice*: Dr. C. B. Esselstyn, Hudson, N.Y.

12:00 m. *Cancer Originating in the Head and Neck*: Dr. Donald P. Shedd, New Haven, Conn.

12:30 p.m. Dr. Ethel J. Alpenfels, Prof. of Anthropology, New York University, N. Y. (Luncheon meeting).

2:00 p.m. *Cancer Research Today*: Dr. George E. Moore, Buffalo, N. Y.

2:30 p.m. *Radioisotopes in Cancer*: Dr. Benedict J. Duffy, Washington, D.C.

3:00 p.m. *Conservatism vs. Radicalism in Colon Cancer*: Dr. I. S. Ravdin, Philadelphia.

3:30 p.m. *Adjuncts to Surgery in the Treatment of Cancer*: Dr. H. T. Randall, New York.

The Society cannot make hotel reservations, and each physician is expected to make his own arrangements for accommodations. For further details, write to Executive Director, American Cancer Society, 9 Clinton Street, Newark 2, N. J.

Obituaries • • •

DR. CHARLES BLOCK

At the age of 39, Dr. Charles Block, winner of the Navy's Bronze Star, died on August 15, 1955. Born in Newark, he was graduated from Hahnemann in 1942. After a year's internship at the Newark Beth Israel Hospital, he was commissioned in the Navy at the height of the war. At the Leyte invasion, Dr. Block had a beach hospital set up almost as soon as the first troops hit the shore. This under-fire gallantry led to the Bronze Star award. Dr. Block was a member of the Essex County Medical Society. He was doing special work in cardiology at the time of his death.

DR. HARRY D. WILLIAMS

On September 7, 1955, Dr. Harry D. Williams, of Trenton's St. Francis Hospital staff died in Philadelphia. Born in 1885 in Hunterdon County, N. J., he was graduated in 1908 from the medical school of the University of Pennsylvania. He came to Trenton to intern at St. Francis and remained in New Jersey's capital city ever since, except for a year's stint in the medical corps of the Army in 1918.

Dr. Williams, a diplomate of the American Board of Internal Medicine, was an internist associated with St. Francis Hospital. He had passed through all grades and was an emeritus staff member at the time of his death. He was active in the Mercer County Medical Society and in the American College of Physicians.

DR. FREDERICK G. SHAUL

Dr. Frederick G. Shaul of Bloomfield died on September 13, 1955, at the age of 78. Born in upper New York State, Dr. Shaul attended the Medical School of the University of Maryland and was graduated in 1901. He interned at Maryland General Hospital, Baltimore, and the Flower Hospital in New York. After concluding his internship he moved across the river and settled in Bloomfield, where he remained in private practice for half a century. He developed an early interest in otology and laryngology and became affiliated with the Newark Eye and Ear Infirmary, eventually reaching the grade of attending surgeon in otology. In 1950 he was transferred from the active to the emeritus staff.

DR. ALFRED M. MAMLET

Dr. Alfred M. Mamlet, chief of otolaryngology at the Clara Maass Hospital, died on September 6, 1955. Dr. Mamlet was a poineer in plastic surgery and was affiliated with six hospitals in Essex County. He was a member of the New York Plastic Surgery Society and had served on the National Board of American Jewish Physicians Committee.

Born in Europe in 1896, Dr. Mamlet came to the United States as a child, and was graduated in 1921 from the Medical School of the University of Vermont. After interning he established his office in Newark and became interested in laryngology and otology as early as 1925.

Announcements • • •

Graduate Courses at St. Michael's

Graduate courses in cardiology and other aspects of internal medicine are announced for this fall by St. Michael's Hospital. Cooperating agencies are the State Department of Health, the Essex County Medical Society, the N. J. Heart Association and The Medical Society of New Jersey. Four general courses are offered:

1. *Internal Medicine*: Wednesdays 10 a.m. to 12 noon, starting October 19, 1955, ending with the session of April 18, 1956. Includes gastro-intestinal malignancies, hyperthyroid disease, anemias, arthritis, hepatitis and diabetes. Doctors taking this course are invited to participate in the hospital's interdepartmental diagnostic conferences (Wednesdays 12:30 to 1:30 p.m.) and case presentations (2 to 3 p.m.).

2. *Cardiology for the General Practitioner*: Wednesdays 3 to 5 p.m. First meeting October 19, 1955; last lecture February 29, 1956. Covers all aspects of applied cardiology—fluoroscopy, cardiac surgery, management of hypertension, anatomy of heart, roentgenology, handling of emergencies, peripheral vascular diseases, physiology of heart function, and so on. Participants in this course are invited to attend the Friday morning cardiac clinics, and sit in on the Wednesday afternoon diagnostic conferences.

3. *Advanced Clinical Cardiology*: Wednesdays 10 a.m. to 12 noon. Conferences, seminars, colloquia and case presentations. First seminar October 5, 1955; last session April 4, 1956. Hypertension, heart failure, coronary disease, arrhythmias, nephritis, rheumatic fever and peripheral vascular disease.

4. *Cardiac Resuscitation*: Single day, all day Saturday. Will be repeated each month. For details, write to Director of Education, St. Michael's Hospital, 306 High Street, Newark 2, N. J.

The registration fee is $25 for any one course. For application forms write to Director of Education, St. Michael's Hospital, 306 High Street, Newark 2, N. J.

Geriatrics Symposium

The American Geriatrics Society will hold a practical symposium on the care of the aged at the Hotel Roosevelt, New York City, November 30 and December 1. All physicians are welcome to attend without fee. For complete program write to Dr. Edward Henderson, 236 Midland Avenue, Montclair, N. J.

Glaucoma Lecture

Dr. Irving H. Leopold of the University of Pennsylvania will speak on the medical treatment of glaucoma at the Academy of Medicine in New York, Monday, December 5, at 8:15 p.m. This is the annual Schoenberg Memorial Lecture under the auspices of the National Society for the Prevention of Blindness.

Diabetes-Endocrine Symposium

On Thursday, October 27 (1955) an all-day symposium will be held at the Memorial Hospital on Diabetes and the Pituitary-Adrenal System. Sessions start at 9:45 a.m. and terminate at 5 p.m. with a 90-minute luncheon break. All aspects of the relatedness of diabetes to the pituitary-adrenal axis will be reviewed. While any physician may attend, he must register in advance by writing to the New York Diabetes Association, 270 Park Avenue, New York (17), N. Y. There is no fee.

Lead Poisoning Course

The University of Cincinnati announces a graduate course on the subject of lead poisoning. This will be presented during the week of November 7, 1955, by the Kettering Laboratory. In addition to a general discussion, the course will include inorganic and organic lead intoxications, and their economic and legal considerations. Round table discussions will be offered. Prevention, diagnosis and treatment will be presented in detail.

Physicians and industrial hygienists interested in the course will write to the Institute of Industrial Health, Kettering Laboratory, Eden and Bethesda Avenues, Cincinnati 19, Ohio.

Authors' Clinic • • •

How to Set Footnotes — Part I.

In preparing your article, you cite specific references by key number. This number is usually written just above the line and is called an exponential or superior numeral, like this:

. . . although in 1946, Butler[3] reported that. . . .

In this example, the numeral "3" is an exponential or superior numeral. At one time it was the custom to give a general reading list (a bibliography) at the end of the article rather than to cite specific references. In modern medical journalism, however, the rule is to mention only those authors whose work you used or cited, and to refer specifically to the point in your text where the citation applies. You still see an occasional bibliography or reading list at the end of articles, but this has generally been replaced by the specific reference list.

In typing your manuscript, instruct your secretary to double space or triple space the copy. (Never, but never, submit a single spaced paper). You will then have enough space between lines for superior (exponential) numerals.* Tell the typist to roll down the carriage about ¼ space, type in the superior numeral, roll it back and continue. Do *not* just type the exponential number parenthetically like this:

. . . although in 1946, Butler (3) reported that. . .

If you do it that way, it is hard to distinguish the exponential[3] from the (3) used to indicate third in a series. So type the numeral in exponentially. It may slow down the typing a trifle, but it is worth it.

American medical editors use three methods for arranging citations. Examine the periodical for which your manuscript is intended to see which is used there. The three methods are (1) in order of their appearance in the article (2) chronologically, and (3) alphabetically by authors cited. Suppose you made only four references in your article. All four of them in a single paragraph like this:

"The method of treating dandruff by applications of witlessin was first described by Jones [1] but the modern technic is the one formulated in 1941 by Arnold.[2] Until 1946, when Kelly [3] introduced the method of homogenizing the witlessin, this remained the only effective remedy. Success with homogenized witlessin has since been reported by Babson,[4] and has been confirmed by . . . "

In this sample, the exponential numbers 1,2,3,4. are arranged in the order in which the references appeared in the mansucript—Jones first and Babson last. If this were intended for a journal which used the alphabetical arrangement, Arnold would have been citation number one and Kelly would have been number four, thus:

". . . was first described by Jones [3] but the modern technic is the one formulated some years later by Arnold.[1] Until 1946 when Kelly [4] introduced . . . has since been reported by Babson [2] and has been confirmed by . . . "

When the alphabetical arrangement is used, citations do not appear as footnotes, but are collected at the end of the article. The order-of-appearance arrangement, however, permits either the footnote or the bibliography style, according to the policy of the periodical.

A few journals arrange citations in the order in which they were originally published, so that the most recent is the last one listed. Usually these journals do not use exponential numbers. When the bibliographic list contains more than one article by the same author, the year is placed parenthetically after his name. For example:

"Ever since the pioneer work of Najjar it has been known that bacteria which might synthesize B complex may disappear after administration of sulfonamides. However, as Cayer (1945) has shown, the changes in the tongue are not always due to niacin deficiency. Indeed, in another study, Cayer (1953) found that human subjects with unquestionable deficiency disease . . . "

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*This, however, is not the reason for double or triple spacing. The reason is that the editor must have room between lines for instructions to the printer. A single spaced manuscript is usually rejected without reading.—H.A.D.

Here the editor preferred to arrange citations chronologically, and no exponential numerals were used. To distinguish the two references to Cayer, therefore, the year is inserted, in the text, immediately following the author's name.

If in doubt as to how to arrange references use the "order of appearance" arrangement. This is the commonest citation technic in modern medical journalism.

In general, follow the method of citation used in *Index Medicus*. A complete citation would list in order:

(1) the reference number, (2) last name of the author, (3) first name and middle initial (4) title of the article, (5) name of the source journal, (6) its volume number, followed immediately by a colon, (7) the page on which the article began, a hyphen, and the page on which the article terminated, (8) the month of issue, and if a weekly or semimonthly journal, the day too—these are often placed in parentheses—and finally, (9) the year of issue. Here for instance is such a citation:

17. Siegal, Samuel J.: Transverse Myelopathy Following Recovery from Pneumococcic Meningitis. Journal of the American Medical Association, 129:547-561 (October 20) 1945.

This is the safest way in which to write the citation unless the journal to which you are sending it uses a shorter form. The issue number is never given. For example, the November 9, 1946 issue of the Journal of the American Medical Association is volume 132, number 10. However, the "number 10" is of no use in the citation, since the date (November 9, 1946) enables a searcher to find the exact issue, and the "10" would only cause confusion.

Many journals cite only by the first page of an article, not by both first and last pages. In that case, the above citation would be 129:547 and not 129:547-561. However, it is easy enough for the editor to delete the final page numeral, and the author should always include it in his reference unless he knows by prior inspection that it is never used.

Some periodicals omit the title of an article. The safe practice is to include it unless the author is certain that the journal never cites articles by title.

The same rule applies to the use of the author's full first name. Many journals would cite by initials in lieu of first name, as "Butler, V. P." instead of "Butler, Vincent P." An analysis of previous issues of the periodical will disclose their citation practice and this should be followed. When in doubt, write out the first name in full.

Roman numerals are no longer used in citations. Even if the source journal prefers roman numerals, the author must transcribe them to arabic. For example, if you look at the 1936 issues of the American Journal of Orthopsychiatry, you will see that "Volume VI" is printed on the cover. Nonetheless, in citing these issues, the author will write "6" not "VI."

Italics—Titles of articles are not underlined or italicized. Book titles are italicized in many journals, but not in those published by the American Medical Association.

Joint Authors. If a source article is written by two authors, both are listed. If by four or more authors, mention the senior author (that is, the one first listed) and then add "and others" or "*et al.*" With respect to papers by three authors, practices vary. This JOURNAL uses *et al.* for three or more authors. The American Medical Association separately lists three authors, but says "and others" with four or more others. Thus:

Arbuckle, R. K., Sheldon, C. H., and Pudenz, R. H.: Pantopaque Myelography, Radiology, 45:356-359 (September) 1945.

or:

Arbuckle, R. K. *et al.*: Pantopaque Myelography, Radiology, 45:356-359 (September) 1945.

Books—The complete book reference contains the citation number, followed by: (1) Last name, first name, middle initial of author, (2) Title of the book, (3) Edition number—this may be omitted if only one edition has ever been published and it is an old book, (4) City in which the book was published, (5) Name of publisher, (6) Year of publication. If the book contains several volumes, the (7) volume number is placed at the end of the citation; and if specific page reference is desired, the page number is written at the end of the reference.

Example:

17. Clendening, Logan and Hashinger, E. H.: *Methods of Treatment*. ed. 8. St. Louis, C. V. Mosby Company (1945).

Since most editors italicize the title of a book, it should be underlined in manuscript. However, the press of the American Medical Association does not italicize book titles, and underlining the title is therefore not desirable in manuscripts submitted to any of the American Medical Association periodicals. Book titles are never abbreviated.

Compilations. Many modern medical texts are, in a sense, anthologies. They are written by various authors, usually one author per chapter. Then an editor integrates the chapters. In citing a compilation, take care to credit the author not the editor.

For example, Dr. Henry Kessler of New Jersey recently edited a book called *Principles of Rehabilitation.* One of the chapters deals with psychiatric disability. Dr. Victor Vogel wrote this chapter. Suppose you want to cite something in this chapter. If you look at the title page or at the spine of the book you will see Kessler listed as the author. Actually you want to cite Vogel, not Kessler. Here is how:

9. Vogel, Victor H.: Psychiatric Disabilities. In Kessler, H. H.: *Principles of Rehabilitation*, ed 2. Philadelphia, Lea and Febiger, 1955. p. 267.

Duplicate or Repeated References. How do you refer a second time to a source which you had cited earlier in the manuscript? Several methods are available. The simplest is to repeat the exponential number of the reference whenever the source author appears. This can always be done if references are collected at the end of an articles. If the journal uses the footnote system, this may be confusing, since the original reference may be several pages earlier in the article. You could set up a new number and key it to *op. cit.* or *loc. cit.* But the reader still has to turn back several pages to find the original reference. Or you could repeat the entire reference with a new exponential number. Do not do this unless you are certain that the journal uses footnotes instead of a terminal bibliographic listing. If in doubt (and always if the references are collected at the end of the article) simply use the same exponential number throughout for the same reference.

Consider the following example. Your paper opened with:

Although Obuchowski [1] was actually the earliest observer to describe omphalitis due to the Bacillus pippicki, it was Jones [2] whose definitive description first attracted world-wide attention. Since then, Fang, Schine and Ahn [3] have developed . . .

Some pages later, you have reached the 15th citation. Now you want to refer to Jones again. Here are four ways of doing that:

(a) Jones [2] (and let the reader turn back several pages to footnote 2)

(b) Jones [15] (and let footnote 16 read: 16. Jones Ernest, *op. cit.*)

(c) Jones [16] (and let footnote 16 read: 16. Jones, See footnote 2).

(d) Jones [15] (16. Jones, Ernest, Resection of the Umbilicus, JOURNAL of The Medical Society of New Jersey, 53:20 (January) 1954.

Method *a* is generally best unless a vast number of pages intervenes between footnotes 2 and 16. In that event use method *d*. In method *d* you simply repeat verbatim the full content of the original footnote. Methods *b* and *c* are acceptable but awkward.

Multiple References. Most editors dislike multiple exponential numerals. For example, in the past year, Brown, Jones and Robinson have all experimented with streptomycin in tularemia. Suppose you write:

Many reports [1,2,3] have appeared recently on the use of . . .

You could then key "1" to Brown, "2" to Jones and "3" to Robinson. However the citation "many reports [1,2,3] is too easily confused with "many reports."[123] The American Medical Association Press solves the problem by using a single listing for all three, and referring to them later as (a) (b) and (c). For example:

1. (a) Jones, Inigo. Streptomycin in Tularemia. Journ. of Biotherapy, 17:253-259 (October 1946). (b) Brown, Anselm. Biotics in Tularemia. Maryland Medical Journal, 98:29-34 (November) 1946. (c) Robinson, Bruce. Comparative Effectiveness of Streptomycin and Sulfonamides. Annals of Heliotherapy, 7:365-366 (December) 1946.

If it then becomes necessary to refer to Brown, he is keyed as Brown.[1b]

This makes it very complicated. Actually, the easiest way to meet the problem is to mention each source separately, as:

"Brown,[1] Jones,[2] and Robinson [3] and many others have recently reported on the effectiveness of streptomycin in tularemia."

This requires a slight recasting of the sentence structure but it is better not only because it simplifies subsequent references, but also because it gives each author credit in the text.

That's enough for now. Next month, same column, you will learn what to do about secondary citations, foreign references, citing of unpublished and personally communicated data, footnotes to tables, citing of abstracts, and the mechanics of typing in, setting up, inserting and deleting references and footnotes.

HENRY A. DAVIDSON, M.D.
Editor

Book Reviews • • •

Many of the reviews in this section are prepared in cooperation with the Academy of Medicine of New Jersey.

Communicable Diseases. By Franklin H. Top, M.D. and 24 collaborators. Pp. 1208. Ed. 3. St. Louis, 1955, Mosby. ($18.50)

With the advancing front of chemotherapy and antibiotics, there is a tendency to play down the communicable diseases. Yet these diseases are still serious threats to mankind. Further, their control is not just a matter of prescribing wonder drugs. It is also necessary to use public health and epidemiologic technics. It is good to have a solid text like this to remind us that infectious diseases are still with us. (Incidentally, the chapter on influenza, but not the chapter on poliomyelitis is by Jonas Salk.) This book is beautifully bound, and is meaty with practical pointers. It has a glossary in the back, presumably intended for lay readers, since the lexicon is too elementary for physicians. The illustrations are all from Parke, Davis and Company's *Therapeutic Notes*. If it were not for the curiously high price ($18.50) the book could be recommended to all general practitioners, internists and pediatricians. The text includes useful material on dosage, on prevention of communicable disease, on epidemiology, on serum reactions, on sulfonamides and antibiotics and on the laws regulating reporting and control of communicable diseases. The diseases themselves are individually treated (classified, in novel fashion here, by portal of entry, such as respiratory, gastro-intestinal and so on). This is a valuable hand-book for the practitioner, both as a source of data if he is called on to deliver a speech, and as a source of treatment and diagnostic suggestions.

ULYSSES M. FRANK, M.D.

The Medical Significance of Anxiety. Richard L. Jenkins, M.D. Biological Sciences Foundation, Washington, D. C. 1955. Pp. 46. Paper. ($1.00)

Anxiety is probably the most neglected aspect of general medical practice. Dr. Jenkins closely follows Cameron's classification. Only in a minority of cases is the conflict causing the manifestation of anxiety a conscious one. Many psychosomatic disorders are listed as sequelae of a conscious or unconscious anxiety producing conflict. Psychosomatic disorders are considered the result of a disequilibrium at a general psychologic, the neurophysiologic and the psychologic level. Conversion reactions, amnesia, fugue states, obsessive-compulsive reactions, alcoholism, and finally the schizophrenic break as "the most severely dysfunctional result of intolerable anxiety" are discussed.

As Dr. Jenkins sees it, the goal of treatment is not to try to abolish anxiety, but to keep it under control. In clear and understandable language, Dr. Jenkins discusses the patient-physician relationship. He reviews psychotherapy as well as the management of anxiety with drugs. Dr. Jenkins does not propose that the general practitioner should treat all cases of anxiety, but recommends referral of patients with "malignant" symptoms to a psychiatrist.

Dr. Jenkins offers a thought provoking hypothesis of the nature of anxiety as a disturbance in the thalamo-cortical circulation. The book is highly recommended for both general practitioner and psychiatrist.

FELIX UCKO, M.D.

A Handbook of Hospital Psychiatry. By Louis Linn, M.D. New York 1955. International Universities Press. Pp. 559. ($10.00)

In psychiatry, the glamor is with out-patients, the drudgery is with in-patients. So most of the wordy literature of this word-bound specialty is concerned with the interpretation of intellectual and emotional processes. Here, however, is—probably for the first time—a compendium of hospital psychiatry. Dr. Linn roams over the whole field. He tells you how to apply for research funds, how to apply a Funkenstein test, how to handle a recalcitrant relative, what to do about child-patients, when group therapy is contra-indicated, how to use a social worker and what to put in a ward linen closet. He has chapters on the aged and chapters on psychotherapy; chapters on patients who are criminals, patients who are addicts and patients who are pregnant. He talks about mental defectives and about how you can recruit attendants. He discusses the role of the psychiatric nurse and tells you when the VA will—and will not—reimburse for the care of the veterans. He includes a form that can be used for recruiting volunteers and an outline of a three-year training program for residents. There is a chapter on bibliotherapy and one on the "day hospital." And so on, through every nook and cranny of hospital practice, all packed into less than 600 pages.

The author likes to use tradenames—as for instance, Amytal®, Dilaudid®, Demerol®, Dilantin® and Tridione.® And if the publishers were

bound by the conventions of medical journalism and had put that "R" symbol after the trade-names, the R's would have sprouted on some pages like crocuses on a spring lawn. But this is only a venial sin, and is of no consequence against the backdrop of this extraordinarily rich volume. A mere leafing of the volume gives you some idea of the challenge inherent in any mental hospital, and makes you realize that in all psychiatry, the public hospital is indeed the major league.

HENRY A. DAVIDSON, M.D.

Muscular Dystrophy: Third Conference of the Muscular Dystrophy Associations of America. New York 1955. Muscular Dystrophy Associations. Baltimore 1955. Williams and Wilkins. Reprints from the American Journal of Physical Medicine. Pp. 324. Price not stated.

A kaleidoscope of views and facts about muscular dystrophy characterizes this unusual volume. There are articles on muscle chemistry, treatises on the emotional implications of dystrophy and suggestions about medical management. The role of the social worker is reviewed here. Clinical, research, rehabilitative and physiologic aspects of muscle dystrophy are all pointed up. It is a veritable encyclopedia of the subject and probably the only one of its kind. The doctor can dip into any chapter and find material of interest and material of use.

HERBERT BOEHM, M.D.

Modern Drug Enclyclopedia and Therapeutic Index. Edited by Marion E. Howard, M.D. Ed. 6. New York. Drug Publications, Inc. 1955 ($15.00)

Some 5000 drugs and biologicals are now available to you. To help you wend your way through the jungle of new drugs, trade-names, synonyms, variants on trade names, and so on, Dr. Howard has edited this extraordinary compendium. Each drug is listed under its ordinary name—usually its proprietary trade name. You are told how to pronounce the name, who makes the drug, what its chemical name is, how it is used and packaged, what routes of administration are available in what dosage and what side-effects to expect. For some odd reason, the editor still clings to the confusing tripartite division into allergens, biologicals and pharmaceuticals. (A single alphabetical arrangement would be too easy). There are also four indices—one arranged by manufacturers, one by therapeutic use, one by generic name (for example, you can look under isoniazide and see what tradenamed products are available), and one general index. Skin detergents are grouped under "D" for "detergents" and bulk laxatives are indexed under "B" for bulk. Except for a few mild eccentricities like this, the *Modern Drug Encyclopedia* is one of the most useful volumes the general practitioner, pediatrician and internist can have. Together with "Medical Economics" *Physicians Desk Reference*, it will be a constantly consulted work and an authoritative source for information. It is as useful and necessary as your telephone book.

VICTOR HUBERMAN, M.D.

Handbook of Pediatrics. H. K. Silver, M.D., C. H. Kempe, M.D. and H. B. Bruyn, M.D. 1955, Los Altos, California. Lange Medical Publications. Pp. 549. ($3.00)

By now the Lange series of handbooks has won a place for itself in the medical bags, book-cases and desk drawers of American practitioners. This text is written with terseness. It is a dehydrated, de-fatted manual of pediatrics, focussed at the day-by-day needs of the general practitioners. It is, inevitably, somewhat dogmatic in spots, but this is the necessary price for compactness. In addition to chapters on each disease group, there are special monographs on history taking, use of the laboratory, antibiotics, adolescents, growth, electrolytes, poisons, pediatric emergencies, emotional problems, and "pediatric management." The book will wear badly with constant use because of the paper covers. And it *will* get constant use. At the price of one not-so-good dinner, the doctor can have this valuable *vade-mecum* for his desk or bag.

RALPH N. SHAPIRO, M.D.

New and Nonoffficial Remedies, 1955. By The Council on Pharmacy and Chemistry of The American Medical Association. Pp. 654. Philadelphia, J. B. Lippincott Company, 1955. ($3.35)

Once again the annual edition of NNR comes to the rescue of the physician who is confused by the veritable jungle of new tradenamed drugs. The tests and standards which were formerly bound in with NNR have been omitted and will be published in a separate volume. Also omitted is the old "Bibliography of Unaccepted Products." However, this volume still includes a list of drugs omitted and drugs added since the previous edition.

For each drug there is listed the generic name, the tradename, the manufacturer, the formula, the actions, usage, and dosage. The book also contains a discussion of the metric system and the rules determining acceptance of drugs in NNR. Accepted products are grouped usefully by general classification.

HARVEY BLUESTONE, Ph.G., M.D.

TUBERCULOSIS *Abstracts*

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Vol. XXVIII October, 1955 No. 10

Problem of the Asymptomatic Pulmonary Lesion

By R. Drew Miller, M.D., The Journal Lancet, March, 1955.

A 67-year-old clothing salesman registered at the Mayo Clinic on November 11, 1953, for evaluation of an asymptomatic x-ray shadow in the field of the upper part of the left lung. The abnormal shadow had been discovered in June, 1949, in a routine roentgenologic survey. Follow-up roentgenograms were made in the next few months. Apparently little change occurred in the rontgenologic appearance of the lesion until August, 1951. In December, 1951, the patient had a short episode of substernal pressure-type pain, which was relieved by pills and an injection. No apparent change was noted in the electrocardiogram to indicate localized myocardial injury. On January 23, 1952, he entered his local tuberculosis sanatorium and began to receive antimicrobial therapy with streptomycin and para-aminosalicylic acid. Use of the para-aminosalicylic acid (PAS) was discontinued after four months, but the streptomycin was given for two more months. The roentgenologic appearance of the lesion showed little change during the six months of treatment, and the patient was dismissed for roentgenologic follow-up studies on an outpatient basis. The patient was not aware of any positive results of procedures for the detection of tubercle bacilli by smear, culture, or inoculation of guinea pigs with specimens of the sputum or with gastric washings. In September, 1953, he had noted slight fever and cough of a few days' duration, relieved by injections of penicillin.

In October, 1953, a follow-up roentgenogram of the thorax showed possible slight enlargement of the shadow under observation. Further investigation was recommended. There were no unusual symptoms at this time, however.

The patient was found to be an asthenic white man weighing 117 pounds, and 67 inches in height. The blood pressure was 140 systolic and 80 diastolic, in millimeters of mercury. The cardiac rhythm was regular and there were no significant murmurs. Other than slight diminution of breath sounds and occasional soft rales over the left posterolateral aspect of the thorax, the findings were not significant. Lymph nodes were not enlarged.

Urinalysis, determination of hemoglobin, leukocyte count, and determination of the blood urea gave results within normal limits. The sedimentation rate was 15 mm. in one hour by the Westergren method. Result of the Kline test was negative. A tuberculin test, in which 0.0001 mg. of purified protein derivative was used, was reported as giving a negative result. A second injection of 0.005 mg. of purified protein derivative was reported to have produced a positive reaction after forty-eight hours. An electrocardiogram showed only left axis deviation. Examination of the sputum, bronchial smears, and bronchial washings for malignant cells and acid-fast bacilli gave negative results.

A roentgenogram of the thorax showed a rather extensive lesion on the left at the level of the first and second anterior interspaces. Tomograms of the area showed no definite cavitation. The serial roentgenograms of the thorax made in the

patient's home town, when reviewed, showed very slight enlargement of the shadow over the two-and-one-half-year period. Bronchoscopy revealed no gross abnormalities.

Because of the indeterminate nature of the lesion after clinical study and observation, left thoracotomy was advised. A grade three adenocarcinoma of the posterior segment of the upper lobe of the left lung was found at operation, with no involvement of the hilar nodes. Left pneumonectomy was performed. The patient made an uneventful recovery.

Follow-up reports from the patient's local physician indicated that symptoms of cerebral metastasis appeared. The patient died on June 5, 1954. A large metastatic lesion of the right cerebral hemisphere was found at necropsy.

The value of survey roentgenograms, which is widely appreciated among the laity as well as within the medical profession, is again demonstrated in this case. The case further points out the difficulty so often encountered in making a clinical diagnosis after an asymptomatic lesion is discovered. The lesion located peripherally in the field of the upper part of the left lung had characteristics of either a chronic inflammatory process or a neoplasm. Although it was possible to detect the abnormality by means of the roentgenogram, this did not provide the etiologic diagnosis. Laminated calcium, diagnostic of a granulomatous process, was not evident in any of the serial thoracic roentgenograms of this patient. Even tomograms, made just before operation, did not demonstrate calcium. Thus, a malignant neoplasm could not be ruled out from a roentgenologic standpoint. The value and limitations of roentgenologic technics in the detection of asymptomatic lesions have been reviewed by Good and associates. Serial roentgenograms showed little change in the abnormal shadow. Although failure of such a shadow to change might suggest that the lesion thus depicted is benign, this case demonstrates how a bronchogenic carcinoma, particularly an adenocarcinoma, may show little change over a period of months or even years.

The failure of previous bacteriologic studies by home physicians to demonstrate tubercle bacilli in the patient's sputum or gastric washings cast doubt upon the clinical diagnosis of pulmonary tuberculosis. Furthermore, failure of the shadow to regress during combined chemotherapy should lead to further questioning of the previous clinical diagnosis. The skin tests indicated that the patient previously had been infected with tubercle bacilli and probably also Histoplasma capsulatum, but additional bacteriologic studies had failed to show that the pulmonary lesion was related etiologically to the cutaneous reactions. In this case a clinical diagnosis could not be made by the usual laboratory methods, and thoracotomy became necessary. The incidence of malignant lesions among asymptomatic circumscribed pulmonary lesions has been pointed out by Harrington.

The patient's ultimate clinical course illustrates the serious complications which often follow the discovery of bronchogenic carcinoma, even though the hilar nodes were not involved. Tinney and Moersch found symptoms referable to the nervous system in 12 per cent of the 448 cases of carcinoma of the lung. In 4 per cent of the entire series, the neurologic symptoms represented the presenting complaint. King and Ford, in reviewing 100 cases of metastasis to the central nervous system from carcinoma of the lung, concluded that these types of metastasis occur early and frequently. This further demonstrates the importance of early diagnosis and treatment of asymptomatic lesions of the lung.

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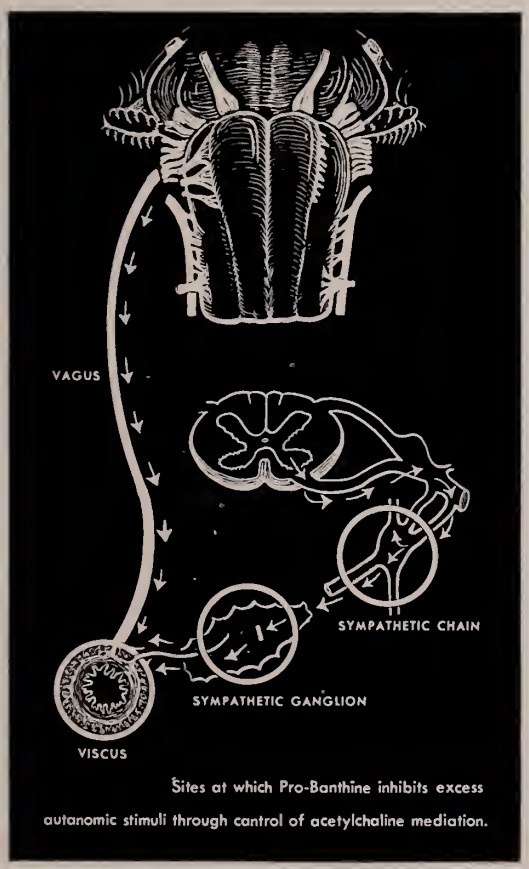

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1. Schwartz I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: Gastroenterology *25*:416 (Nov.) 1953.

2. Roback, R. A., and Beal, J. M.: Gastroenterology *25*:24 (Sept.) 1953.

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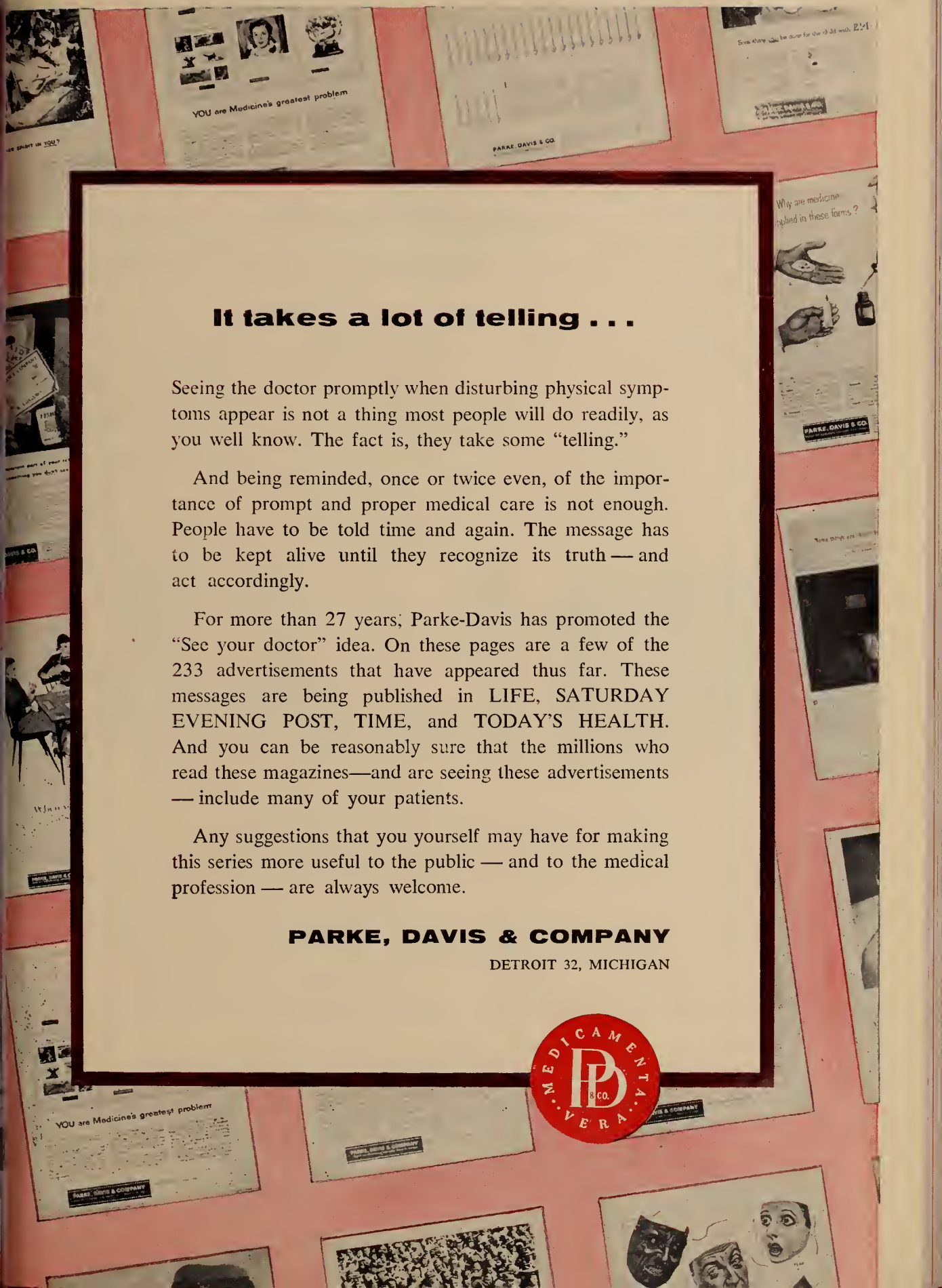

It takes a lot of telling . . .

Seeing the doctor promptly when disturbing physical symptoms appear is not a thing most people will do readily, as you well know. The fact is, they take some "telling."

And being reminded, once or twice even, of the importance of prompt and proper medical care is not enough. People have to be told time and again. The message has to be kept alive until they recognize its truth — and act accordingly.

For more than 27 years, Parke-Davis has promoted the "See your doctor" idea. On these pages are a few of the 233 advertisements that have appeared thus far. These messages are being published in LIFE, SATURDAY EVENING POST, TIME, and TODAY'S HEALTH. And you can be reasonably sure that the millions who read these magazines—and are seeing these advertisements — include many of your patients.

Any suggestions that you yourself may have for making this series more useful to the public — and to the medical profession — are always welcome.

PARKE, DAVIS & COMPANY

DETROIT 32, MICHIGAN

MEDICAMENTA VERA

for strong, sturdy, solid growth

Lactum

LIQUID OR POWDERED

NUTRITIONALLY SOUND FORMULA FOR INFANTS

Lactum®-fed babies get all the proved benefits of a cow's milk and Dextri-Maltose® formula. Mothers appreciate the convenience and simplicity of this ready-prepared formula. Physicians are assured the important protein margin of safety for sturdy growth.

Lactum-fed babies are typically sturdy babies because Lactum supplies ample protein for sound growth and development.

The generous protein intake of babies fed milk and carbohydrate formulas such as Lactum promotes the formation of muscle mass. It also provides for good tissue turgor and excellent motor development.[1]

(1) Jeans, P. C., in A. M. A. Handbook of Nutrition, ed. 2, Philadelphia, Blakiston, 1951, pp. 275-278.

MEAD | SYMBOL OF SERVICE TO THE PHYSICIAN

MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA, U. S. A.

THE JOURNAL

OF

THE MEDICAL SOCIETY OF NEW JERSEY

Entered as second-class matter, September 5, 1906, at the post office at Orange, New Jersey, under Act of March 3, 1879

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CONTENTS—Pages 549 to 606

Roster of Officers, Advertising Page 3A

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Telephone EXport 4-3154

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Offering for the convenience of your psychiatric patients modern therapies and facilities. Located in peaceful surroundings on a 300 acre farm.

Facilities for acute psychiatric cases. Proper classification.

Psycho-therapy, electro-shock therapies, deep insulin therapy, occupational therapy, physio-therapy, and recreational therapy.

Accommodations for chronic cases including arteriosclerotic and senile.

Outpatient therapy and consultations by appointment.

Member of the N. J. Hospital Association, licensed by the Department of Institutions & Agencies of the State of New Jersey.

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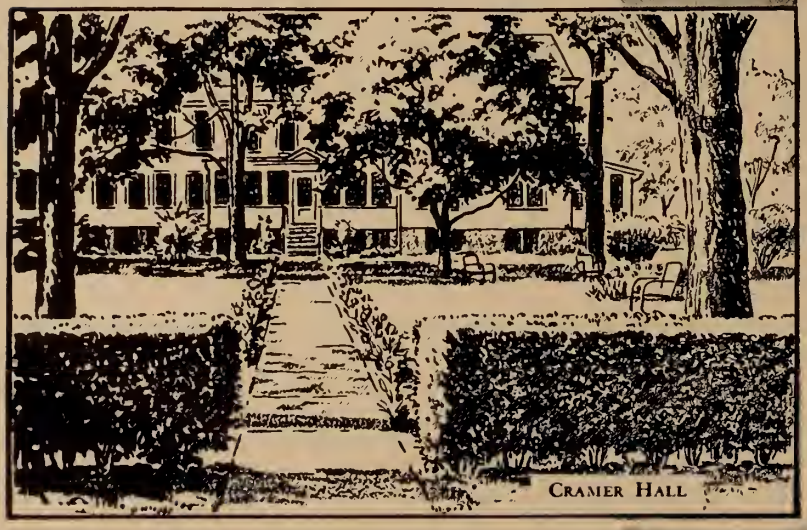
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THE MEDICAL SOCIETY OF NEW JERSEY

Founded July 12, 1766

PLACE OF PUBLICATION, PRINTING AND MAILING, 116 LINCOLN AVE., ORANGE, N. J.
EXECUTIVE AND EDITORIAL OFFICES, 315 WEST STATE ST., TRENTON 8, N. J. Tel. EXport 4-3154

STATE SOCIETY PLAN

Accident and Health Insurance

The MEDICAL SOCIETY OF NEW JERSEY has officially selected the plan of our Company for Accident and Health Insurance and the policy is available to Society members in accordance with the Company's rules and regulations for acceptance of risks.

BRIEF OUTLINE OF COVERAGE

Accidental Bodily Injury Benefits —Full monthly benefit for total disability, from FIRST DAY, limit 60 months. One-half monthly benefit for partial disability, limit 6 months. Limit of time for total and partial combined 60 months.

Sickness Benefits —Full monthly benefit for total disability, commencing with EIGHTH DAY of disability, limit 24 months, house confinement not required.

Arbitration Clause —The Committee on Medical Defense and Insurance of The Medical Society of New Jersey are the SOLE arbiters in the event of any claim disagreement between Company and policyholder.

Cancellation Clause —Cancellation Clause, Standard Provision No. 16, not included in policy. The Company reserves the right to decline to renew on the following grounds only:

A. Non-payment of premium.
B. If the insured retires or ceases to be actively engaged in the medical profession.
C. If the insured ceases to be an active member of The Medical Society of New Jersey.
D. If renewal is refused on all policies issued to all members of the Society, in which event 60 days prior notice in writing must be given.

ANNUAL PREMIUM RATES*

(Applicable to ages at entry and attained at annual renewal of insurance)

Monthly Benefits	Dismemberment Benefits	Ages up to 50 Next Birthday	Ages 51 to 60 Next Birthday	Ages 61 to 65** Next Birthday
$100.00	$ 5,000	$ 29.50	$ 34.00	$ 43.00
150.00	7,500	43.60	50.35	63.85
200.00	10,000	57.70	66.70	84.70
300.00	15,000	85.90	99.40	126.40
400.00	20,000	114.10	132.10	168.10
500.00	20,000	141.30	163.80	208.80
600.00	20,000	168.50	195.50	249.50

* Premiums may be paid half-yearly or quarterly, pro-rata.

* All rates above INCLUDE $1000 Accidental Death Benefit. Additional Accidental Death Benefit up to $4000 (making a total of $5000) may be procured for an additional annual premium of $1.30 per $1000.

Coverage for hospitalization and nursing fees is available at a small additional premium.

** Although the age limit for acceptance of risks is the 65th birthday, once issued there is no termination age limit for renewal and the rates of the last age group remain stationary.

This Company has been in business more than fifty-eight years and is one of the leading writers of Accident and Health Insurance, with a surplus to policy holders of more than seven million dollars.

If you are not insured under this plan or if you want further information, communicate with the undersigned managers.

Issued Exclusively by

NATIONAL CASUALTY COMPANY

Through

E. and W. BLANKSTEEN, Mgrs.

Authorized Disability Insurance Representatives of The Medical Society of New Jersey

75 MONTGOMERY STREET DElaware 3-4340 **JERSEY CITY 2, N. J.**

SPECIAL ANNOUNCEMENT

To the Members of The Medical Society of New Jersey

We are happy to announce the approval of

THE EXTENDED PROFESSIONAL DISABILITY POLICY

under the Group Disability Plan with the NATIONAL CASUALTY COMPANY sponsored by your Society.

For a modest additional premium you can add this policy to your present one in this group and assure yourself of an income in case of an extended disability beyond the limits of coverage provided in the basic Physicians' Special Policy which you now carry with the National Casualty Company as a member of this Society.

Your basic policy provides monthly benefit for two years in the event of a sickness disability, and five years for an accident disability.

FEATURES OF THE NEW POLICY—

1. ACCIDENT BENEFITS—Continued for life.
2. SICKNESS BENEFITS—continued for five additional years, making a total of seven years.

ELIGIBILITY—

1. You must hold a basic policy in the group.
2. You must be under age 60.
3. Acceptable physical risks may purchase up to $400 a month but for no greater amount than that carried in the basic plan.
4. Impaired risks are eligible for not more $200 per month if 75% of the existing policyholders, under age 60, apply during sixty (60) day charter enrollment to be announced by mail to policyholders under age 60.

The enrollment period will not be extended. We heartily recommend this policy to you for your immediate consideration.

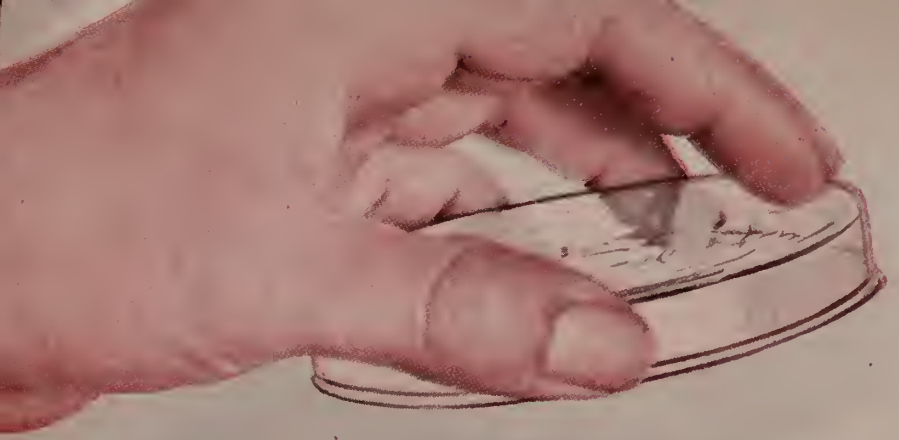
Those not presently insured under the basic policy described on the opposite page may apply to the agency for a basic policy as well as for the extended coverage and policies will be issued if they are acceptable risks, in accordance with the company's underwriting rules and regulations.

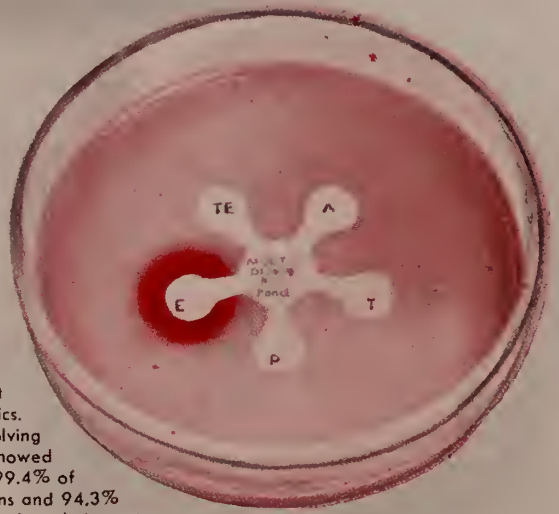
ANNUAL PREMIUM RATES*

(APPLICABLE TO AGES AT ENTRY AND ATTAINED AT ANNUAL RENEWAL OF INSURANCE)

Monthly Benefits	Ages up to 50 Next Birthday	Ages 51 to 60 Next Birthday	Ages 61 to 65** Next Birthday
$100.00	$ 11.00	$ 14.00	$ 18.00**
200.00	22.00	28.00	36.00**
300.00	33.00	42.00	54.00**
400.00	44.00	56.00	72.00**

***Premiums may be paid half-yearly or quarterly pro-rata, concurrently with basic policy**
****Renewal premiums only. This extended policy not renewable beyond 65th birthday.**





DESTROYS ENTEROCOCCI

This blood agar plate shows a strain of *beta* hemolytic enterococcus. Note extreme sensitivity of this organism to ERYTHROCIN—yet it easily resists the other antibiotics. Additional data: A study[1] involving 202 enterococcic strains showed sensitivity to erythromycin in 99.4% of *alpha* hemolytic strains and 94.3% of *beta* hemolytic strains.

specific against coccic infections

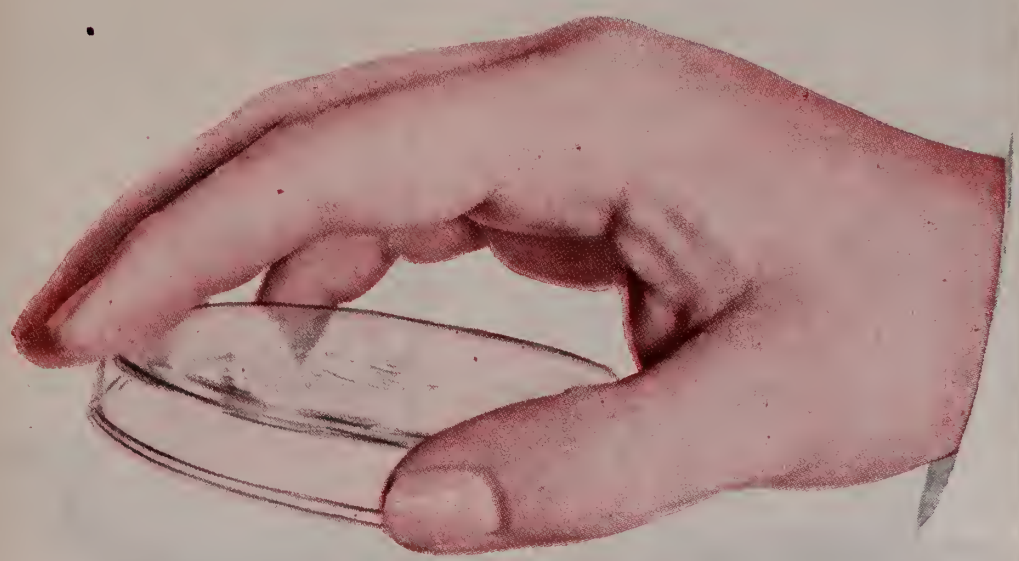
Now, you can prescribe *specific therapy* against staph-, strep- or pneumococci by simply writing *Filmtab* ERYTHROCIN Stearate. Since this coccic group causes most bacterial respiratory infections (and since these organisms are the very ones most sensitive to ERYTHROCIN) doesn't it make good sense to prescribe *Filmtab* ERYTHROCIN when the infection is coccic?

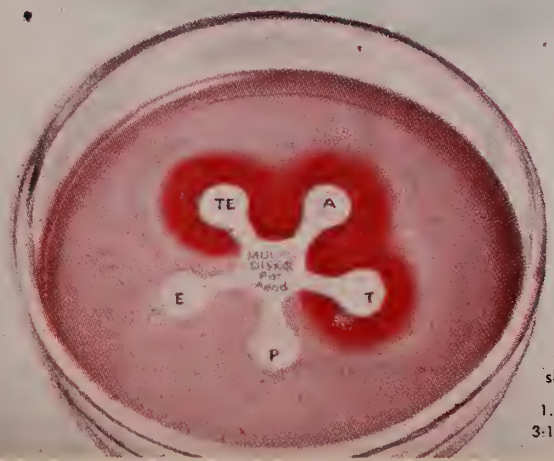
filmtab®

Erythrocin®

Erythromycin Stearate, Abbott)

STEARATE





SPARES

INTESTINAL FLORA

This sensitivity test shows ERYTHROCIN and the some antibiotics against a typical intestinal strain of *E. coli*. Note that ERYTHROCIN and penicillin do not affect this gram-negative organism —although the other antibiotics show marked inhibitory action.

1. Eisenberg, et al., Antib. & Chemo., 3:1026-1028, Oct., 1953.

with little risk of serious side effects

Since ERYTHROCIN is inactive against gram-negative organisms, it is less likely to alter intestinal flora—with an accompanying low incidence of side effects. Also, your patients seldom get the allergic reactions sometimes seen with penicillin. Or loss of accessory vitamins during ERYTHROCIN therapy. *Filmtab* ERYTHROCIN Stearate (100 and 250 mg.) is supplied in bottles of 25 and 100 at pharmacies everywhere. Abbott

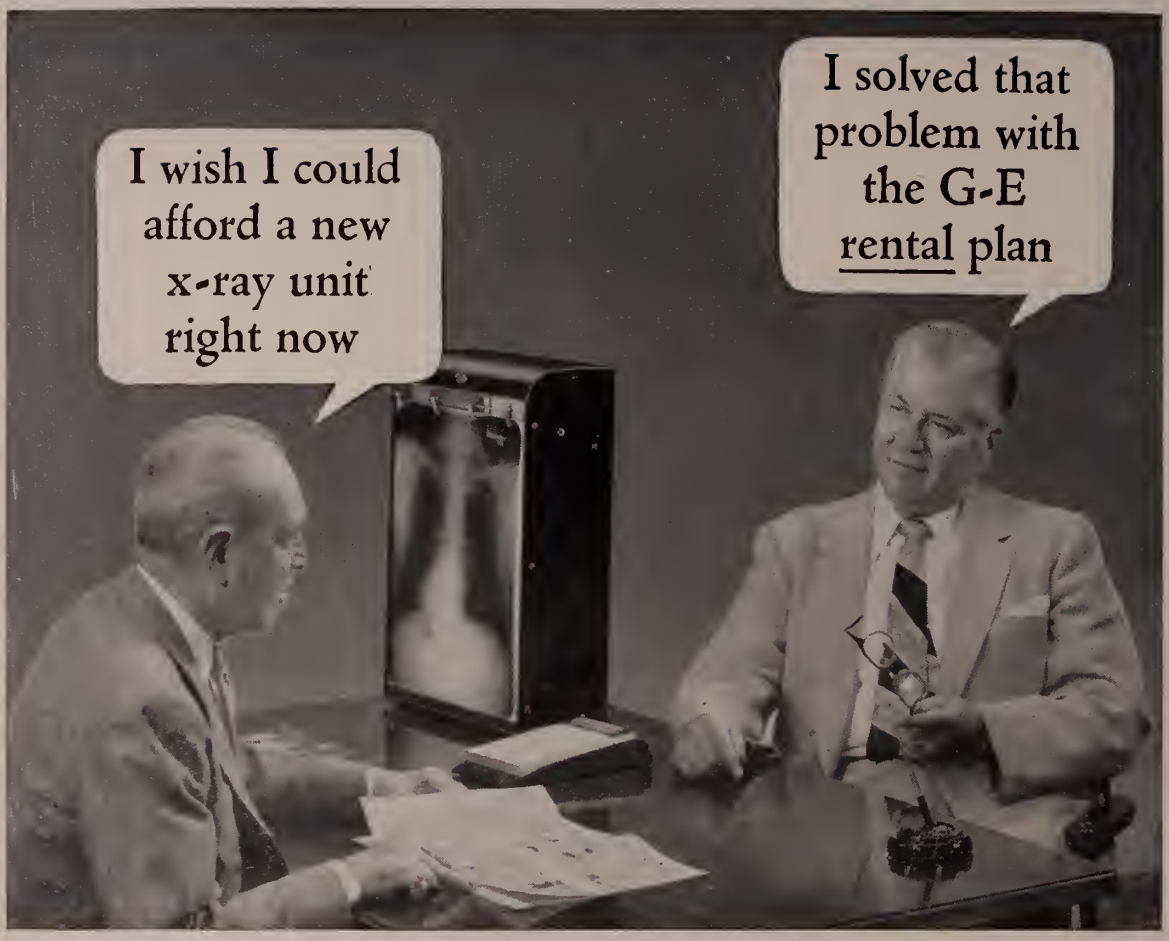
filmtab®

Erythrocin®

(Erythromycin Stearate, Abbott)

STEARATE

® Filmtab—Film scaled tablets; patent applied for.



G-E MAXISERVICE®

gives you the x-ray apparatus you need with no initial capital investment

THIS is the way to bring your x-ray facilities up to date without knocking your budget out of kilter.

The G-E Maxiservice Rental Plan puts modern x-ray apparatus to work for you . . . lets you serve your patients more efficiently with equipment designed for the latest technics. Through periodic replacement feature, you can keep your installation always up to date . . . without "trade-ins."

One monthly rental charge includes repair parts, tubes, maintenance and local property taxes. It can be budgeted as operating expense against income from your installation. Your capital is not tied up in apparatus.

Ask you G-E x-ray representative about the Maxiservice Rental Plan.

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ANNUAL CLINICAL CONFERENCE

CHICAGO MEDICAL SOCIETY

February 28, 29, March 1 and 2, 1956

Palmer House, Chicago

DAILY HALF-HOUR LECTURES BY OUTSTANDING TEACHERS AND SPEAKERS on subjects of interest to both general practitioner and specialist.

PANELS ON TIMELY TOPICS TEACHING DEMONSTRATIONS

SCIENTIFIC EXHIBITS worthy of real study and helpful and time-saving TECHNICAL EXHIBITS.

The CHICAGO MEDICAL SOCIETY ANNUAL CLINICAL CONFERENCE should be a **Must** on the calendar of every physician. Plan now to attend and make your reservation at the Palmer House.

For Nasal Congestion in THE COMMON COLD

Physiologically acceptable Neo-Synephrine hydrochloride solution promptly constricts the engorged nasal capillaries which are responsible for nasal congestion in the common cold. When the nasal mucosa is reduced to its normal state, the nasal passages resume their proper patency, drainage is possible, and the patient can again breathe freely.

By its shrinking action on the nasal mucosa, Neo-Synephrine helps to keep the sinuses aerated and the openings to the eustachian tubes clear.

Neo-Synephrine within minutes produces decongestion that lasts for hours.

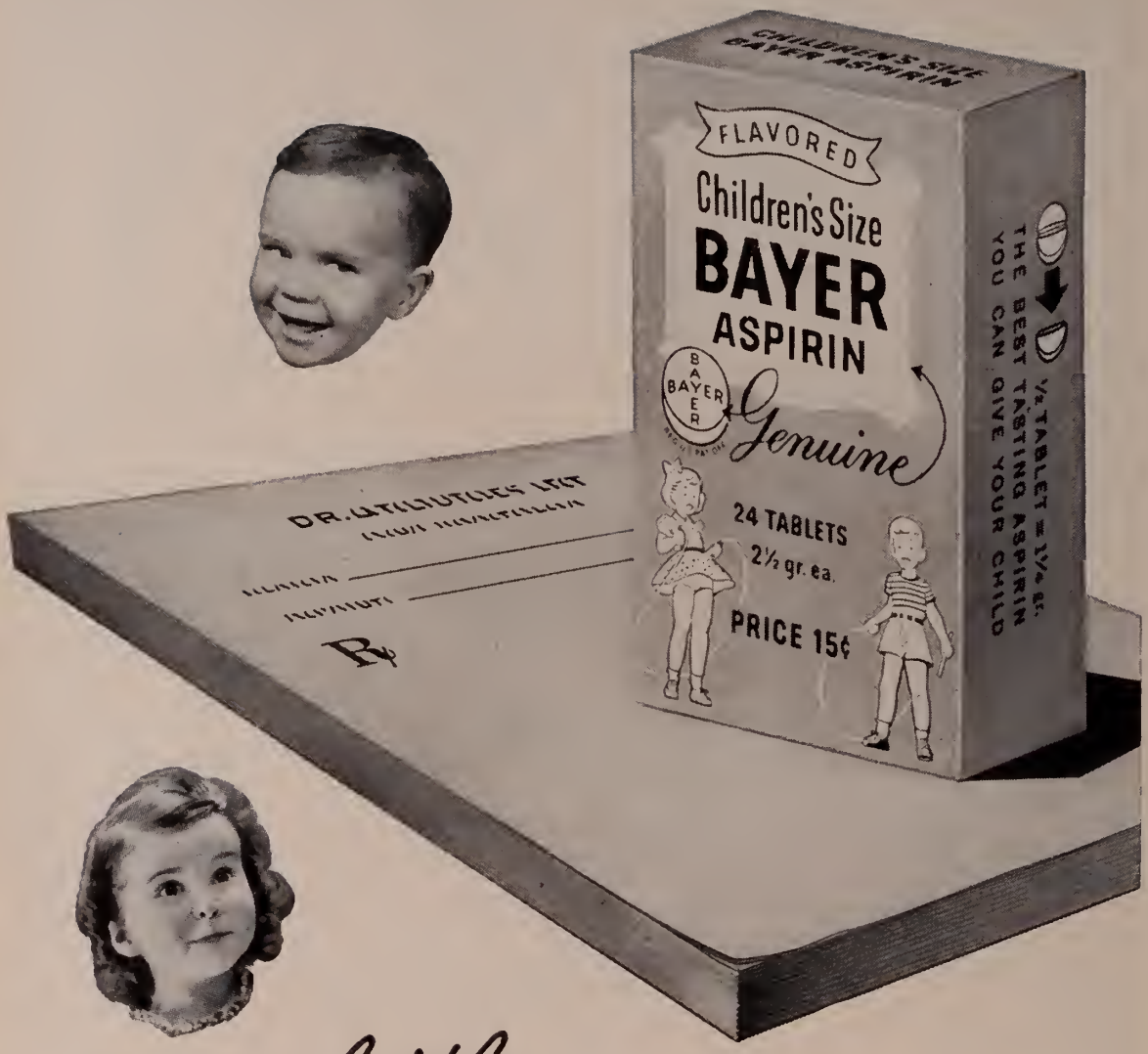
NEO-SYNEPHRINE®

Hydrochloride

DOSAGE FORMS Solutions: 0.25% — 0.25% (aromatic) — 0.5% — 1% —
Emulsion 0.25% — Jelly 0.5%
Nasal Spray 0.5% (plastic, unbreakable squeeze bottle)
Nasal Spray Pediatric 0.25% ***(new introduction)***
Contains Zephiran® Cl 0.02% (1:5000), antibacterial wetting agent and preservative for greater efficiency.

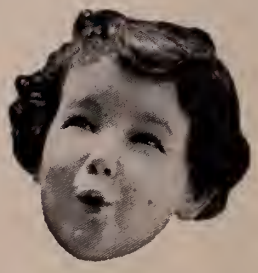
Winthrop-Stearns INC. NEW YORK 18, N.Y. WINDSOR, ONT.

Neo-Synephrine (brand of phenylephrine), trademark reg. U.S. Pat. Off.



little

How to win friends ...



The Best Tasting Aspirin you can prescribe.

The Flavor Remains Stable down to the last tablet.

15¢ Bottle of 24 tablets (2½ grs. each).

We will be pleased to send samples on request.

THE BAYER COMPANY DIVISION

of Sterling Drug Inc.

1450 Broadway, New York 18, N. Y.

Ménière's syndrome, cerebral arteriosclerosis, fenestration surgery, streptomycin toxicity

radiation therapy

narcotization

motion sensitivity in every form of travel

effective
control of
nausea
vomiting
vertigo

associated with labyrinthine dysfunction

BONAMINE* HCl

Brand of meclizine hydrochloride

Two convenient dosage forms . . . tasteless TABLETS (25 mg.) and mint-flavored, universally acceptable CHEWING TABLETS (25 mg.). Bonamine is ethically promoted. *Trademark

Pfizer PFIZER LABORATORIES, *Division, Chas. Pfizer & Co., Inc.,* Brooklyn 6, N. Y.

KARO SYRUP **BELONGS IN THIS PICTURE!**

... a carbohydrate of choice
in milk modification for 3 generations

OPTIMUM caloric balance—60% of caloric intake, gradually achieved in easily assimilable carbohydrates —is assured with Karo. Milk alone provides 28%, or less than half the required carbohydrate intake.

A MISCIBLE liquid, Karo is quickly dissolved, easy to use, readily available and inexpensive.

A BALANCED mixture of dextrins, maltose and dextrose, Karo is well tolerated, easily digested, gradually absorbed at spaced intervals and completely utilized.

PRECLUDES fermentation and irritation. Produces no reactions, hypoallergenic. Bacteria-free Karo is safe for feeding prematures, newborns, and infants—well and sick.

LIGHT and dark Karo are interchangeable in formulas; both yield 60 calories per tablespoon.

CORN PRODUCTS REFINING COMPANY • 17 Battery Place, New York 4, N. Y.

The organisms commonly involved in

Bronchiectasis

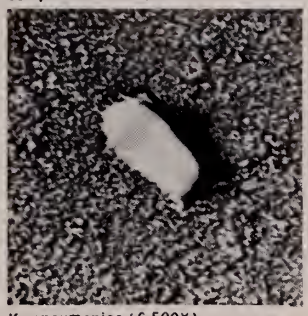
Staph. aureus (9,000X)

Strep. pyogenes (8,500X)

Strep. viridans (9,000X)

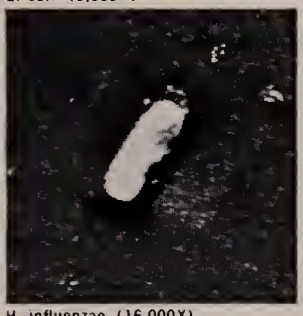
Strep. faecalis (10,000X)

E. coli (8,000X)



K. pneumoniae (6,500X)

D. pneumoniae (10,000X)



H. influenzae (16,000X)

Aerobacter aerogenes (12,500X)

Upjohn

ELECTRON MICROGRAPHS

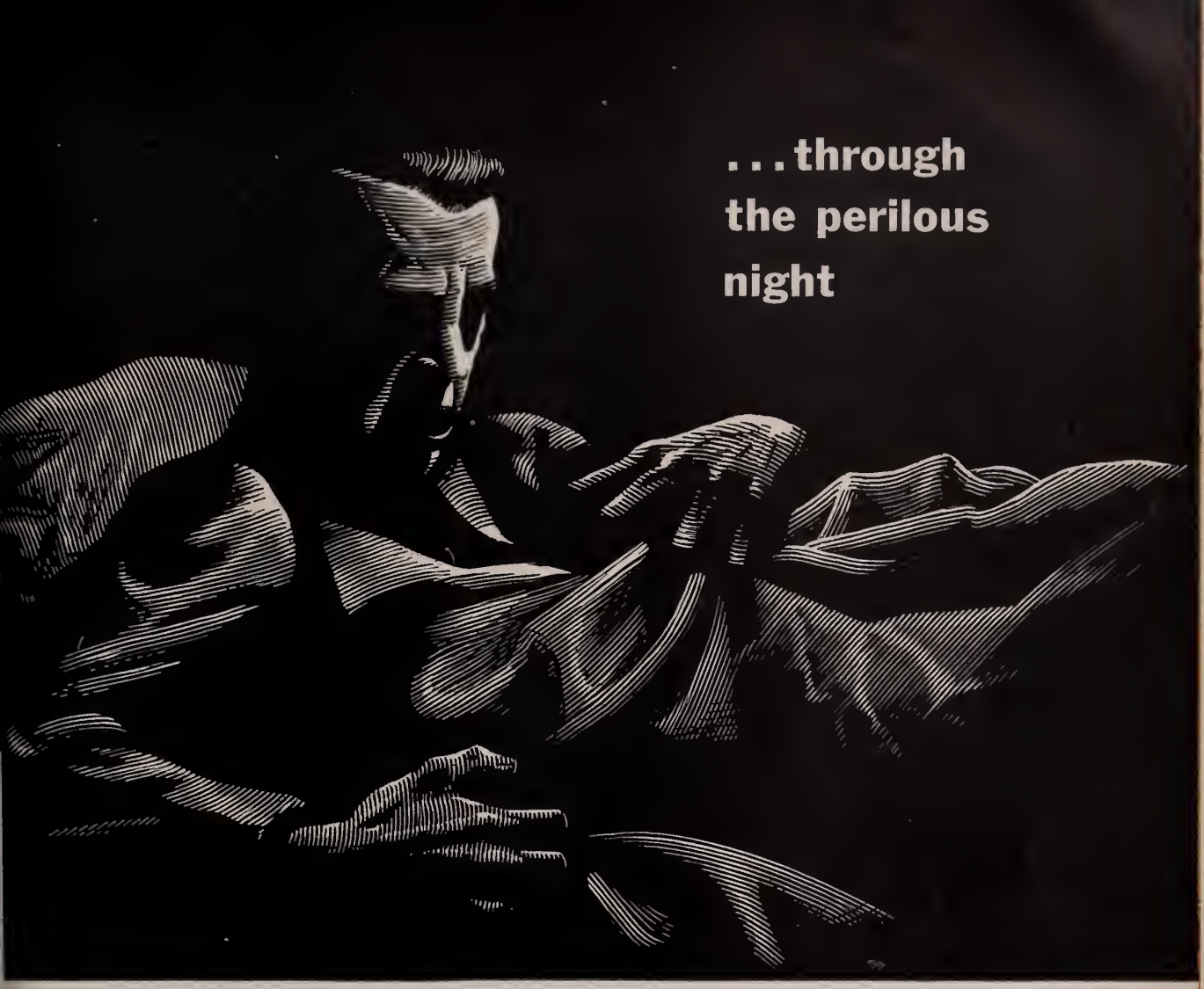
***All* of them are included in the more than 30 organisms susceptible to broad-spectrum**

PANMYCIN*

HYDROCHLORIDE

100 mg. and 250 mg. capsules • 125 mg. and 250 mg./tsp. oral suspension (PANMYCIN Readimixed)
100 mg./cc. drops • 100 mg./2 cc. injection, intramuscular
100 mg., 250 mg., and 500 mg. vials, intravenous

*TRADEMARK, REG. U. S. PAT. OFF.—THE UPJOHN BRAND OF TETRACYCLINE



You can prevent attacks in angina pectoris

Fear is a faithful companion. In angina pectoris, particularly, many patients live in constant dread of recurrent attacks.

Prophylaxis with Peritrate, a long-acting coronary vasodilator, offers new security in a majority of such cases. A single dose affords protection for as long as 4 to 5 hours, compared to 30 minutes or less with nitroglycerin.

Different investigators[1-3] observed that 80% of their patients responded to Peritrate therapy with fewer, less severe attacks . . . reduced nitroglycerin dependence . . . improved EKG's.

A variety of convenient dosage forms now extends these benefits. Adapted to the recommended daily dosage of 40-80 mg., Peritrate is available in 10 mg. and 20 mg. tablets. To help allay the fear of nighttime attacks, Peritrate Delayed Action (10 mg. tablets) may be taken with the regular bedtime dose of Peritrate (plain).

1. Winsor, T., and Humphreys, P.: Angiology *3*:1 (Feb.) 1952. 2. Plotz, M.: New York State J. Med. *52*:2012 (Aug. 15) 1952. 3. Dailheu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.

Peritrate®

tetranitrate

(BRAND OF PENTAERYTHRITOL TETRANITRATE)

WARNER-CHILCOTT

in arthritis
and
allied disorders...

nonhormonal anti-arthritic

BUTAZOLIDIN®

(brand of phenylbutazone)

relieves pain • improves function • resolves inflammation

Employing the serum protein-polysaccharide ratio (PR) as an objective criterion of rheumatoid activity, it has again been shown that BUTAZOLIDIN "...produces more than a simple analgesic effect in rheumatoid arthritis."[1]

Clinically, the potency of BUTAZOLIDIN is reflected in the finding that 57.6 per cent of patients with rheumatoid arthritis respond to the extent of "remission" or "major improvement."[2]

Long-term study has now shown that the failure rate with BUTAZOLIDIN in rheumatoid arthritis, and particularly in rheumatoid spondylitis, is significantly lower than with hormonal therapy.[3]

(1) Poyne, R. W.; Shetlor, M. R.; Forr, C. H.; Hellboum, A. A., and Ishmael, W. K.: J. Lab. & Clin. Med. 45:331, 1955. (2) Bunim, J. J.; Willioms, R. R., and Black, R. L.: J. Chron. Dis. 1:168, 1955. (3) Holbrook, W. P.: M. Clin. North America 39:405, 1955.

BUTAZOLIDIN® (brand af phenylbutazane). Red caated tablets of 100 mg.

BUTAZOLIDIN being a potent theropeutic ogent, physicions unfomiliar with its use are urged to send for literoture before instituting theropy.

GEIGY PHARMACEUTICALS Division of Geigy Chemicol Corporation
220 Church Street, New Yark 13, N. Y.
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51155

Geigy

for
equanimity[1,2]

Equanil®*

Meprobamate

(2-methyl-2-*n*-propyl-1,3-propanediol dicarbamate)

Usual dosage: 1 tablet, t.i.d.

Supplied: Tablets, 400 mg., bottles of 48.

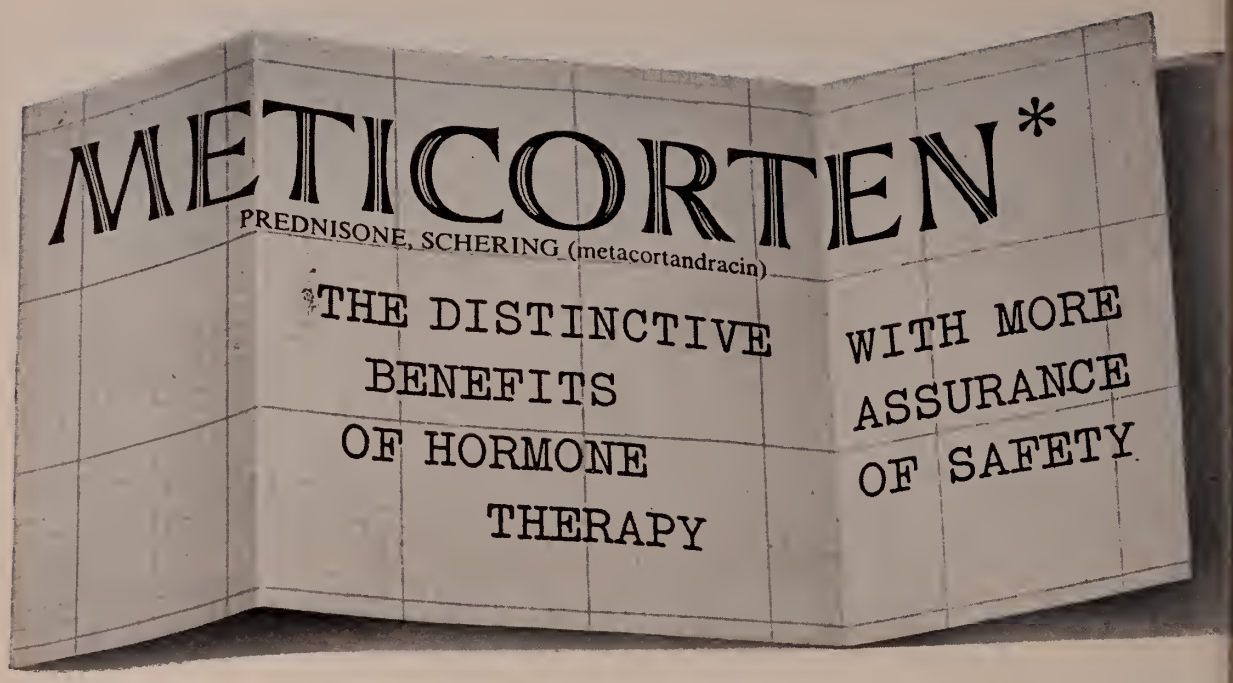
1. Selling, L.S.: J.A.M.A. 157:1594 (April 30) 1955.
2. Borrus, J.C.: J.A.M.A. 157:1596 (April 30) 1955.

Wyeth®
Philadelphia, Pa.

new anti-anxiety factor with muscle-relaxing properties

relieves tension

*Trademark



For physicians who hesitate to use the older corticosteroids because of diminishing therapeutic returns and frequently predominating major undesirable side effects, METICORTEN with its high therapeutic ratio reduces the incidence of certain major undesirable side effects.

- minimizes sodium and water retention
- minimizes weight gain due to edema
- no excessive potassium depletion
- in rheumatoid arthritis, effective relief of pain, swelling, tenderness; diminishes joint stiffness
- in intractable asthma, relief of bronchospasm, dyspnea, cough; increases vital capacity
- clinical response even where cortisone or hydrocortisone ceases to be effective—"cortisone escape"
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BIBLIOGRAPHY

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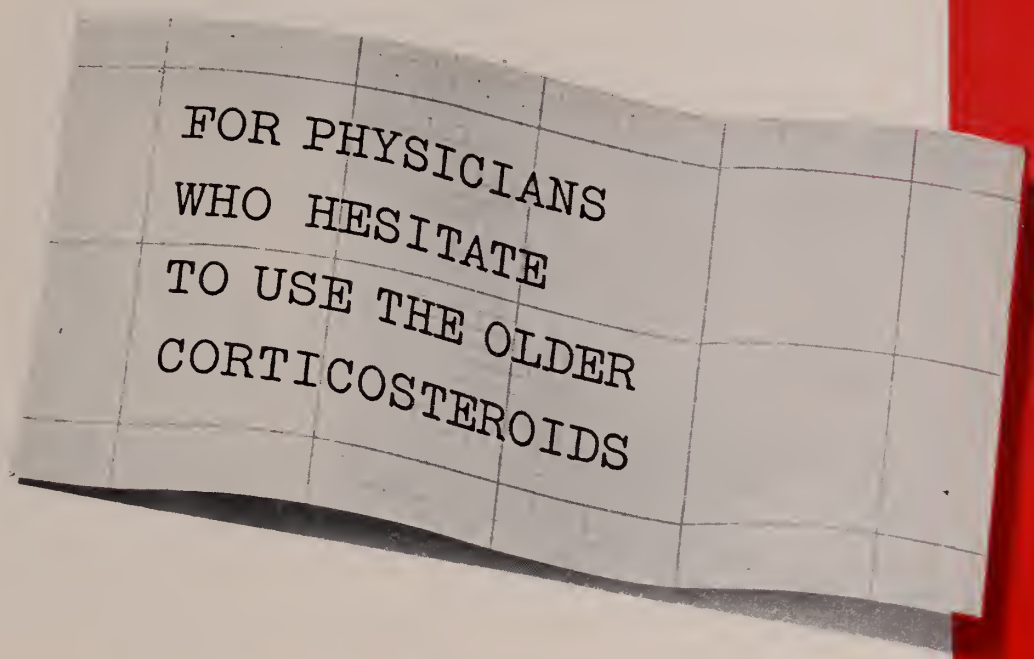

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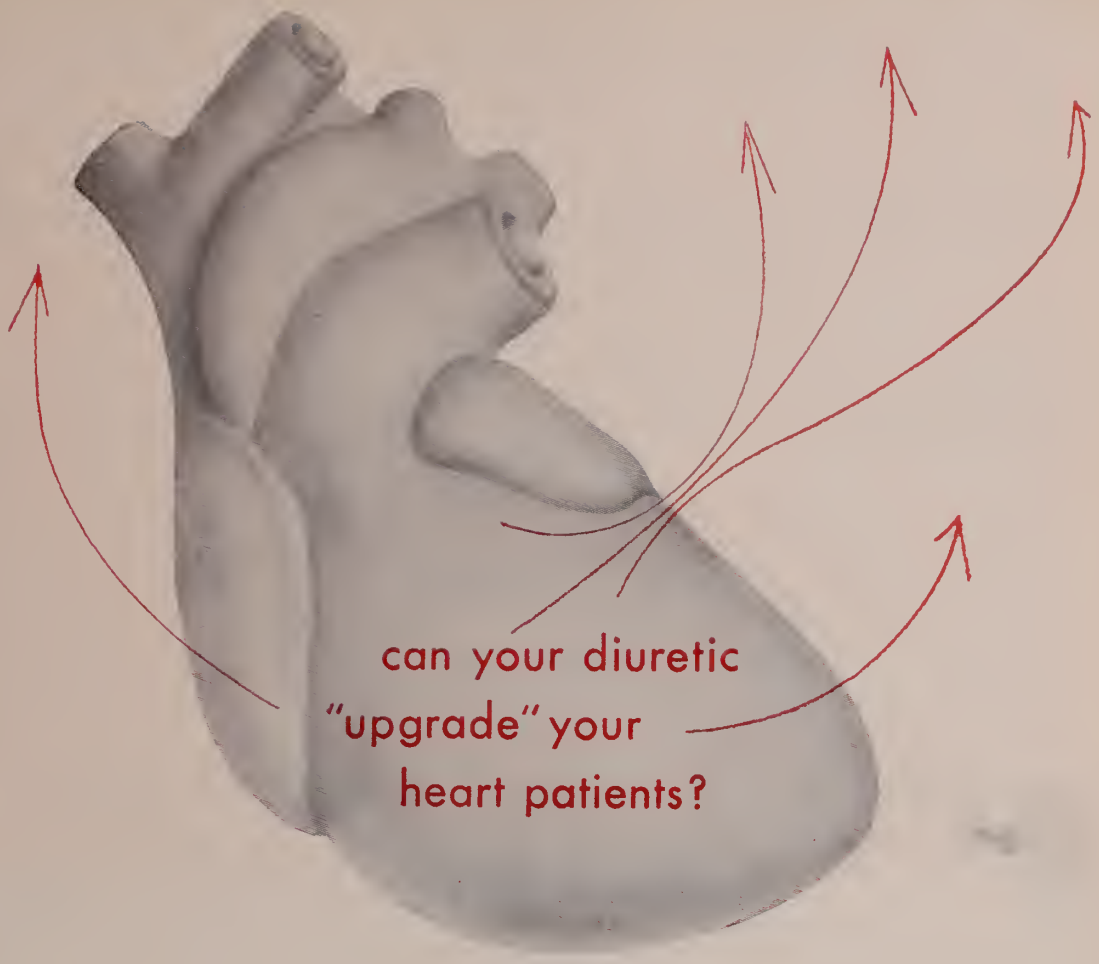

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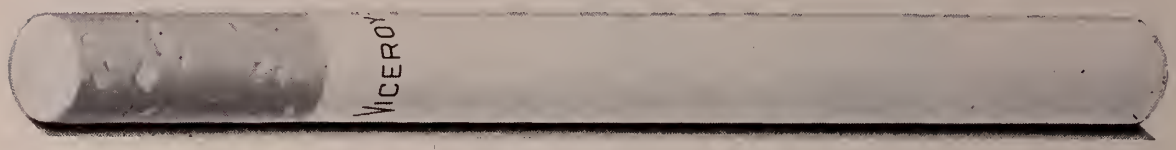

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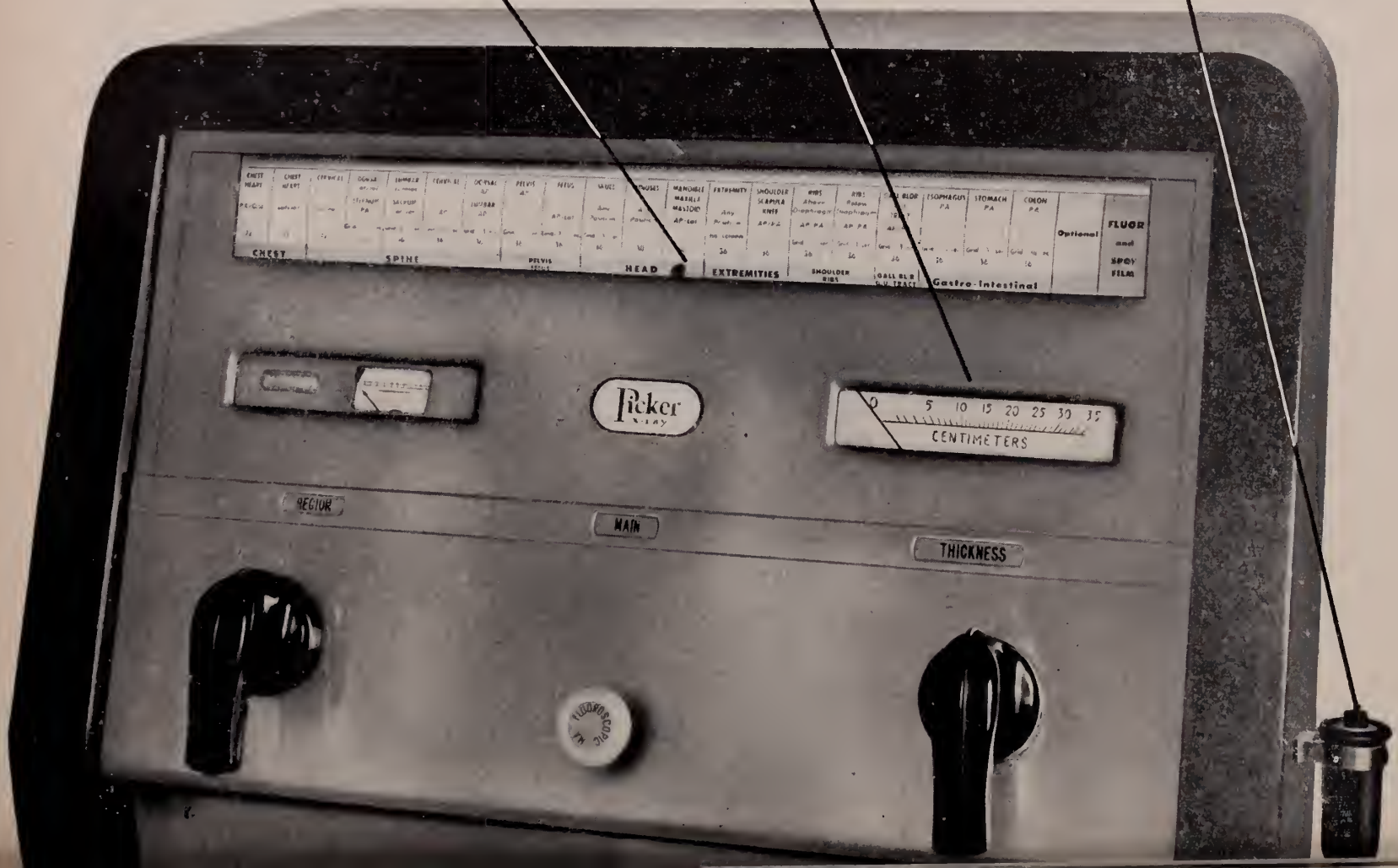

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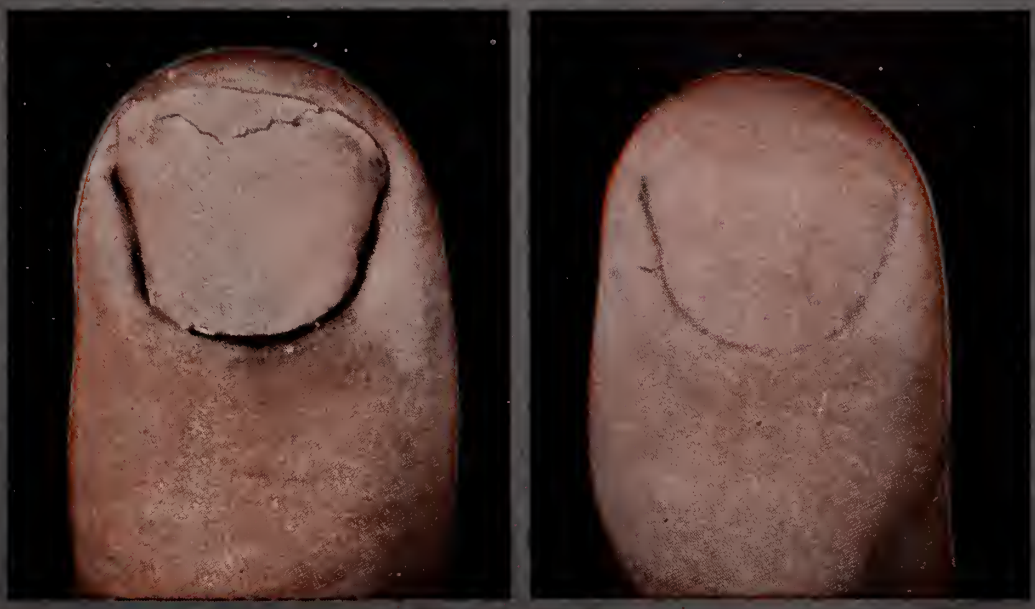

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Pork in the Dietary During Pregnancy and Lactation

CERTAIN NUTRIENTS are required in greater than normal amounts during pregnancy and lactation. Pork meat, though its cost is low, supplies a remarkably high quantity of the nutrients required by the maternal organism in these periods of physiologic need.

During pregnancy the maternal organism may store 3.3 to 5.5 pounds of protein in excess of that contributed to fetal tissue.[1] Enough iron is stored to approximate the entire amount secreted in the milk during 9 months of lactation, in addition to the iron supplied to the fetus.[2]

The body of the newborn infant contains approximately 500 grams of protein, 14 grams of phosphorus, and 0.5 gram of iron.[3] It is estimated that the lactating mother, through breast milk, provides a 26 week old infant with about 12 grams of protein, 76 grams of lactose, and 1.2 mg. of iron each day.[2]

Pork meat, an excellent source of high quality protein, thiamine, niacin, and iron,[4] also supplies valuable amounts of other B vitamins, as well as phosphorus, magnesium, and potassium. The thiamine content of pork is particularly important, since there are few more valuable food sources of this vitamin.[4]

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1. Toverud, K.U.; Stearns, G., and Macy, I.G.: Maternal Nutrition and Child Health, an Interpretative Review, Washington, D.C., National Research Council, Bull. 123, 1950.

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Percentages of Recommended Daily Dietary Allowances* for Pregnant (3rd Trimester) and Lactating Women Provided by 3-Ounce Portions of Cooked Pork Meats and Pork Sausage

	Protein	Iron	Phosphorus	Thiamine	Riboflavin	Niacin	Calories
PREGNANCY (3rd trimester)							
Ham, without bone, 3 oz., cooked[5]	25.0%	17.3%	13.5%	30.0%	10.0%	26.7%	12.5%
Pork Chops, without bone, 3 oz., cooked[5]	25.0%	17.3%	13.3%	47.3%	10.0%	28.7%	10.5%
Pork Sausage, 3 oz., cooked[6]	17.3%	14.0%	9.2%	27.7%	10.1%	18.5%	14.7%
LACTATION							
Ham, without bone, 3 oz., cooked[5]	20.0%	17.3%	10.1%	30.0%	8.0%	26.7%	10.2%
Pork Chops, without bone, 3 oz., cooked[5]	20.0%	17.3%	10.0%	47.3%	8.0%	28.7%	8.6%
Pork Sausage, 3 oz., cooked[6]	13.8%	14.0%	6.9%	27.7%	8.1%	18.5%	12.0%

*Recommended Dietary Allowances, Washington, D. C., National Academy of Sciences—National Research Council, Publication 302, 1953

The nutritional statements made in this advertisement have been reviewed and found consistent with current medical opinion by the Council on Foods and Nutrition of the American Medical Association.

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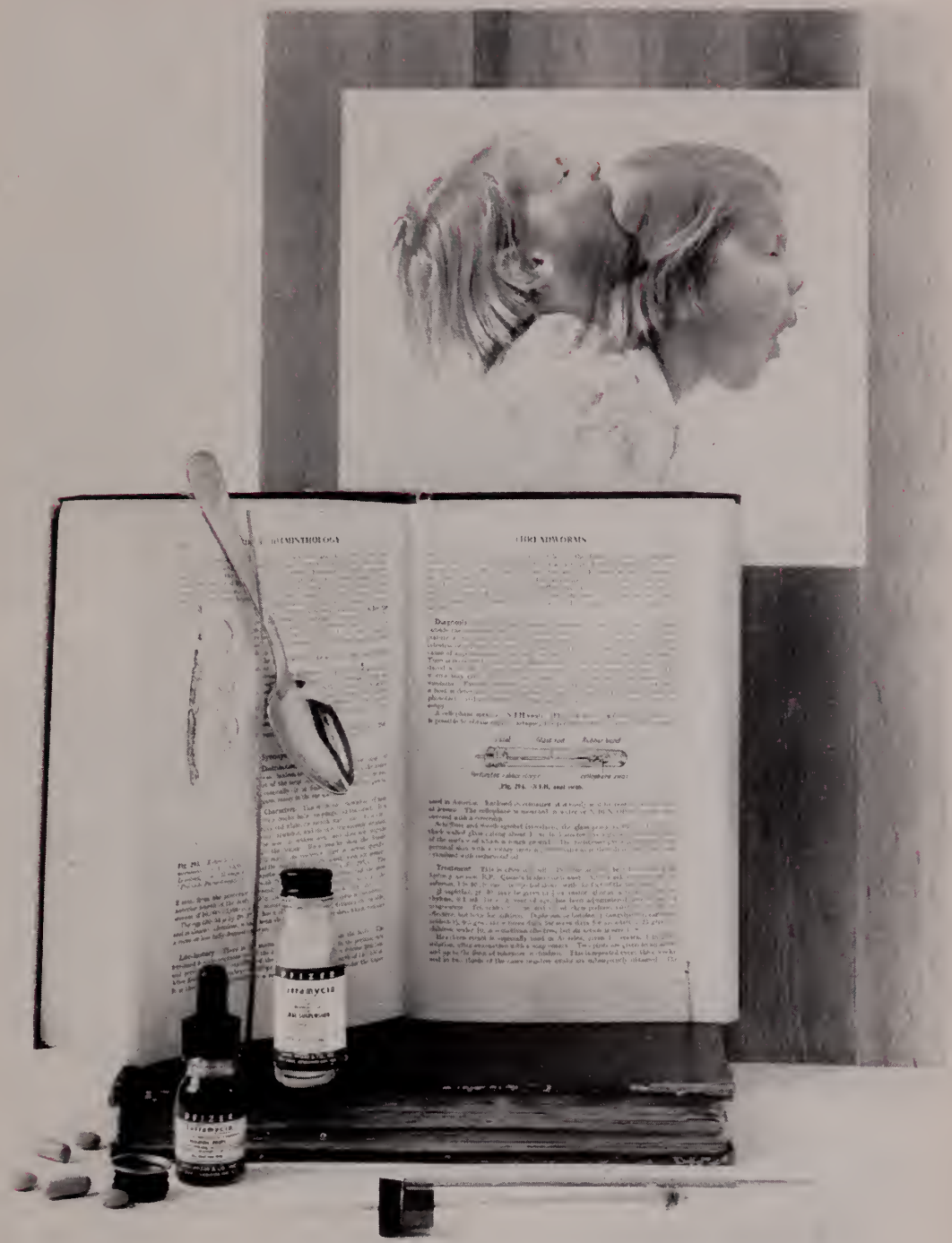

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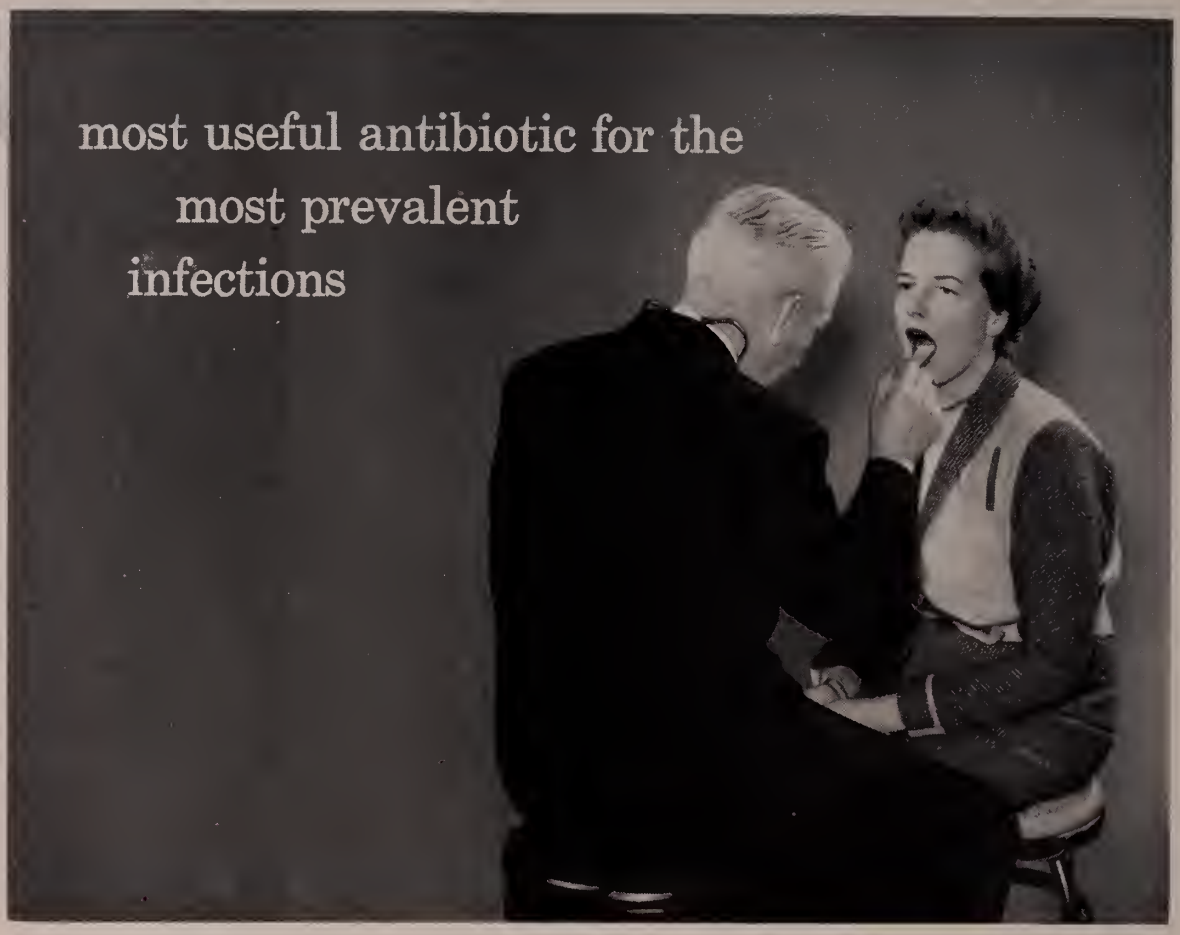

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Editorials • • •

Clichés Are Comforting

Patients always feel more comfortable with a conservative and conventional doctor. They do not like innovations—especially when the patient is the innovatee. A fresh phrase or unusual word suggests a bit of unconventionality. The cliché, as every successful politician knows, is the flag of propriety. To make his patients feel comfortable, the physician should know and use the stereotyped phrases. They fit like an old shoe, (and sound like it too) thus reassuring the patient that all is well on the western front.

Another advantage of the cliché is that it usually mimics the patient's own thought—and thus is agreeably acceptable. For example, tell an active business man that he is operating only on nervous energy, and that if he doesn't take it easy, his batteries will wear out. The patient eats this up (to coin a phrase) because it fits his own ideas and he can use it to justify a winter vacation. And the fact that the doctor uses this worn-out phrase is reassuring. It proves to the patient that he is not in the hands of some radical. And the fact that these phrases are empty of meaning doesn't hurt one bit.

A puzzling question may be handled by saying with a smile: "That's the $64 question" or "That's the $64,000 question" depending on how much T.V. viewing the patient does. You must never say that the question is a poser, a sticker, an enigma, but rather you call it the $64 question or you say it takes a Philadelphia lawyer to answer it. Or maybe it's a hard nut to crack.

No matter what the patient's age, he is, of course, in the prime of life. If any question is raised about this, you can say that a man is as old as his arteries. That establishes you as a doctor to be trusted—a reliable steady observer. Or you can shrewdly observe that the patient is not as young as he used to be, thus

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getting a reputation for perspicacity.

You can promise the patient a thorough check-up, an examination from A to Z (or, to avoid staleness, from tip to toe) or you can offer to go through him with a fine comb. The purpose of all this is to make assurance doubly sure. And when all the test results are available, you are ready to tell the patient what ails him. Now you have a splendid range (I almost said a broad spectrum) of glittering phrases. You can lay the cards on the table or get down to brass tacks. You and he can look the facts in the face, call a spade a spade and speak man to man. What you will *not* do is to beat around the bush or mince matters. You do this by having a heart to heart talk. Straight from the shoulder, of course.

If you find no evidence of any significant disease, you can pronounce the patient fit as a fiddle. It's a silly phrase, but it fits like a glove (or old shoe?). If you fear that "fit as a fiddle" is too original, you can find him in the pink, sound as a bell or in fine fettle. You can promise him a new lease on life if he'll take the medication. Or, if that sounds rash, merely offer him a clean bill of health.

The patient probably smokes or drinks too much. Could be that he burns the candle at both ends or makes mountains out of molehills. So you can tell him to cease and desist. If he doesn't cease and/or desist, he will be adding insult to injury. And if he does, his chickens will come home to roost. You can tell him that! You can admonish him that now he must set his house in order since he is at a cross-roads. (Portable house, maybe?).

If he works too hard, he either has too many irons in the fire or he is keeping his nose to the grindstone. Since you don't want him to grind off that nose to spite his face, you remind him that he is the captain of his fate, the master of his soul, or vice versa.

Fortunately the symptoms, which at the cross-roads brought him to you, are a blessing in disguise. Of course, some disability cannot be corrected. Tell him to grin and bear it. (Why, after all, should he cry over spilled milk?). But, if he *can* correct it, then why should he fiddle (of which he is fit as) when Rome burns? That would be jumping from the frying pan into the fire.

After you have expounded in this manner, the patient should recognize a kindred soul and agree with you. When he rephrases what you have said, you can tell him he sure hit the nail on the head.

Patients are allowed to utter clichés too. Turn about is fair play. I am reminded of the patient who came in when I was an intern. He hadn't been able to void for three days on account of a stricture. (They waited until after I had finished my internship before they announced penicillin). When he was catherterized and finally knew the joy of an empty bladder, he quoted Hamlet: "For this relief, much thanks!"

Don't confuse clichés with proverbs. Proverbs reflect the folk wisdom of the sages; clichés, the banality of the ages.

Medicine's Semantic Booby Traps

In some states a marriage may be annulled if the spouse is "incurably insane". Some insurance policies pay only for "incurable" illness and many pay off only for "permanent" disability. A common concept in workmen's compensation is "total" disability. Social Security benefits are affected by the permanence and totality of current illness. And so it goes. Doctors today are constantly asked to express in crisp, legally precise terms, concepts which, in all conscience, must be indefinite.

Will any doctor say, honestly, that he has "cured" a case of hypertension—or asthma? but will he say that such a disorder is "incurable"? Neither word can be used and since the terms are antonyms (curable-incurable) it is obvious that somewhere between these poles is a vast area known to the doctors but, apparently, *terra incognita* to the lawyers.

Did the cut finger cause the paralysis agitans? Obviously not. Did it aggravate it? No—but wait. What does "aggravate" mean?

Did the cut finger do it any good? Can we deny that worry or pain about the cut might have raised blood pressue—just a bit? And then—you see where *this* can lead to! Is a disabling heart disease today, doctor, due to the "natural progress" of the old heart? Or did worry about his wife hasten it? Or did his daily work impose too great a physical burden on the heart? No physician can really answer, yet every day in some court, some where, some physician is asked precisely this kind of question.

In medicine anything is *possible*. But once let the physician admit that the relationship between the accident and illness is *possible*, and he has opened the door to wild theorizing. The possible becomes the probable and the probable becomes a judicial finding, so that eventually our courts announce that a trivial injury can cause a gross disability. So it is that persons who work regularly are in a "legal" sense totally disabled. Army officers can retire for total disability yet work steadily, and the Veterans Administration is legally bound to pay "total and permanent" disability pension to old men with 40 or 50 per cent disablements. And so by the magic of legal definition, words stop meaning what they mean.

As this practice continues, communication between medicine and law gets more difficult. You must, says the judge—or the adjuster—you must say whether this psychosis is incurable. They will not accept the medically sound conclusion that "recovery is most unlikely." No—you must say *incurable*. And you must say whether this person is "totally disabled" without asking whether the ability to breathe does not mean that some "ability" is left, and therefore "disability" can hardly be total.

Perhaps some day we can establish a firm verbal bridge between our profession and the Law. Perhaps we can agree on a common lexicon, so that these words mean to us what they mean to them. But until that day comes we shall continue to write and speak in one vocabulary while the Law hears and reads us in another.

Armamentarium Disbanded

As predicted in last month's JOURNAL, the word *armamentarium* has finally been placed on the retired list by the SPCE.* To begin with, the Committee on Overworked Words points out, the "armamentarium" refers to equipment for hostile purposes, whereas as doctors use it, the equipment is for beneficent purposes. But the more serious indictment is that *armamentarium* (particularly in the phrase 'therapeutic armamentarium') has become banal from overwork and overuse. When a bottle of aspirin tablets becomes part of an armamentarium it is time, said the Committee, to retire the word. The word is frayed from overuse, stale from repetition, shoddy from wear. Members of the Committee characterized it variously as banal, stereotyped, worn-out, weather-beaten and wilted. It has lost the sparkle of freshness. To refer in these days to a *therapeutic armamentarium* is to plead verbal bankruptcy.

Accordingly, editors who belong to the SPCE will blue-pencil the phrase "therapeutic armamentarium" or even the single word *armamentarium* and replace it with some fresher, less banal, non-stereotyped, more appropriate, more graphic, telling and vivid word. Let it be the most useful drug in our medicine chest, if you wish; or the poorest preparation in our entire pharmaceutical inventory. Let it be a list, a schedule, a catalogue. Perhaps this is the best preparation in our pharmacopeia or our formulary—if you spell these with a lower case "p" or "f", you do not necessarily refer to the official books. Let it be our materia medica or our roster, or even simply the best—or worst—drug available. But let there be no more therapeutic armamentaria!

*Society for the Prevention of Cruelty to Editors, Uninc.

EDWARD G. BOURNS, M.D.
Westfield

Celery Hearts*

In this pungent talk, Dr. Bourns says some things that need to be said and says them with wit and wisdom. And, let us hope, with effectiveness too.

ADAM occupied a position unique in Man's history in more ways than one. His was a life of pure and unsullied existence, in which tranquility was at a peak. He watched the birds, smelled the flowers, tripped through verdant fields, and enjoyed a life so free of complications as to be the cause of some degree of envy in these frenetic days of ours. Let's give way to some facetious wandering for a few moments, and imagine ourselves as Adam, just sweating out a siesta under an olive tree, watching lazy clouds scud across a blue sky, and be faced with no more responsibilities than these:

Concerning:

Housing: "Darling, we gotta sweep outa dis cave someday." or—

Clothing: "Dear, you need a new fig leaf again." or —

Food: "Eve, you quitta oogling that hepple tree and come on ova my house and feeda me pomgranates." or—

Travel: "Mr. Adam, this slightly used catamaran has been carried, and mind you carefully, by four of the gentlest porters in all the Mount Ararat area, and it's a steal for only 1850 yen." or —

The P.T.A.: In the early garden jargon days, it stood simply for "Ponder the Asp." or—

The Medical-Surgical Plan: No one ever said to Adam, "Me make $5,000.00 a year? You kidding, Doc?"

A business man once said. "When I am looking for a new man in my office, I take the prospect out for lunch. I pass him the celery dish, and wait to see what happens. If he reaches in and picks out the celery heart, and leaves me the tough outer stalk, I don't hire him. That man is obviously self-centered, not a considerate person." I would like to present, for your consideration, certain "celery hearts" in our profession in relationship to community responsibility.

What has occasioned the great furore over the past two decades about "Doctors and Medicine?" Why has the seal of the Caduceus become the "Open Sesame" for popular writers? Why don't we read articles like this: "Is your plumber plumbing your drains unnecessarily?" or "Are you being taken to the cleaners by the Rug Cleaners?" or "Are your piano tuner's fees out of tune?" Primarily three things are involved in taking our profession from its place of cherished respect and making news about it a commodity in the social marts. Firstly, it's a matter, journalistically, of news. What Porfirio does and Zsa Zsa answers is of more spicey interest than the travails of John and Jane Doe. We, as physicians, are prime fodder for the grist mills of the fourth estate. Secondly, doctors have been content to lose their grasp on their traditional position of community leadership. It is uncomfortable to have to probe our memories to find among us, physicians of the calibre of the late Dr. William R. Ward of Newark, a wonderful physician, whose long list of civic responsibilities is indeed humbling to all of us. Thirdly, and the most important reason af all, we have

*Address of the retiring President of the Union County Medical Society delivered at that Society's Annual Meeting, April 13, 1955.

become selfish. We are taking from medicine and our communities too many celery hearts. So, we are in a lugubrious condition perhaps best delineated as "social borborygmus." This type of rumbling is better understood by keeping an ear to the ground rather than a stethoscope to the abdominal wall. Too many doctors are getting a remarkably good economic return from their communities without entering, beyond their professional realm, into the spirit of community life.

A physician's work puts him in a very powerful position in relationship to his fellow man and perhaps tends to make of us, "little gods" about whom all the world revolves. This constant and necessary supplication of patients is a subtle force in levering a physician's ego up to a pinnacle beyond which the Gods intended. A sad and irritating proof of this is that many a competent and authoritative doctor, plucked from his Aesculapian Castle and subjected to a harassing cross examination in court, turns out to be a surprisingly bewildered average citizen. Yet, back the next day behind his professional mask, he is again self-assurred, authoritarian, and powerful. The lives we balance daily in our hands are cogent forces in producing this professional isolationism. So, to those who would adjure him to help in community enterprises, he is apt to say, "Look, I'm doing good, why don't you leave me alone?" Our concern is not with those who are honestly levelling with their own capacities, but rather with that larger talented group hiding behind the old hokum, "Not enough time, too busy." Well we find time to eat, sleep, have children, fish, play golf, poker and bridge, see plays and movies, get television blepharitis, and most of all, to labor hard at medical conventions held in the Isle of Bali and New Caledonia.

What then, are the sources from which we pluck celery hearts? First, there is *practice* itself. Has practice been so good that we are getting inaccessible? The public recognizes this possibility. Witness a recent cartoon of a sign in a doctor's crowded waiting room. "Please confine your illness to office hours." Does the fact that we make a living in a community entitle our patients to no more than office hours care? If some among you feel the hackles on your neck rise, I refer you gently to the Chairman of our Emergency Medical Service, who will be glad to enlighten you with a few well-chosen sulphurous remarks.

Second, our *hospitals*. On this touchy matter one must be as agile as a gandy dancer not to be sidetracked down the endless railyards of medical intrigue. We must be watchful that that great white, shimmering shibboleth "protect the patient" doesn't become a subterfuge employed to stifle ambition and ability in order to "maintain the traditions of the Old South," the status quo, which, Andy says, means "the mess we's in." Let us not forget that the word "doctor" comes from the Latin meaning "to teach." Can it be that some doctors are capable of performing certain medical functions but incapable of teaching them? Or too tired? Or too — shall we say — worried? Celery Hearts?

Third, in our *families*. I hestitate to enlarge on this for fear that the Woman's Auxiliary may hoist me on their lovely shoulders to run for something. Do we let our practices so absorb us that our spouses and children feel we dash by them jet-propelled like a refugee from an air-evac seeking the blessed sanctum of the bathroom? But I would be gentle about this and not bruise you more. I'm sure your drums are occasionally reverberated to this tune.

Fourth, in our *organized medical units*: local and city societies, county and state societies, the A.M.A. and the specialty organizations. There is indeed proud flesh here. In the simple matter of attendance at county society meetings, less than one-fifth of our members feel the need to cooperate regularly. The State Society has to beg cooperation at times in simple matters like the filling out of a one-minute questionnaire. The A.M.A. regardless of all else, represents us. Good or bad, it is you and I. If it is mediocre, we should remind ourselves that someone once said, "All that is necessary for mediocrity to reign is that good men be indifferent." Have we given to the A.M.A. Educational Fund? Do we really believe we financed the entire cost of our medical education? Could we be still basking in the favor of this succulent celery heart?

Finally in our *communities*. By this time, you see the ramifications of what I mean. We

can think of scores of situations and myriads of places behind which to hide when the Community Chest says, "Can you help?" or the Boy Scouts, "Can you help us get a leader?" or the P.T.A., "Doctor, can't you show up for a while to hear your kids sing?" These, then, are celery hearts, the holes we leave because we take but don't replace.

What can you do to improve the situation?

My first proposition is this: Let us begin by keeping ourselves physically fit. Our life expectancy as physicians is, to all intents, and purposes, almost exactly that of the general public, a situation likely to make the public wonder if they are not indeed gullible! Only by enjoying good health can we find the energy to give to community enterprises as well as caring for our patients. To this end I am presenting to the Society, tonight, a plan for an annual physical examination for physicians.

Second, we've got to be partakers, and not just take a part. Jim Bryan, in his excellent book "Public Relations in Medical Practice," says, "It is not enough to be a good doctor. The physician has a transcendent obligation to himself, to his profession and to the human race, to be a good neighbor and a good citizen." We need, therefore, to shed our nurtured professional shroud for the cloth of community service. To quote Jim Bryan again, "We can establish negotiable credits in the market of public opinion only by prompt fulfillment of our obligations and by consistently demonstrating our personal responsibility."

Third, we must vote and participate intelligently and actively in public affairs. I find it hard to analyze my feelings toward one of our colleagues who said recently, "Naw, I don't vote." Perhaps Plato supplied the answer when he said, "The punishment the wise suffer who refuse to take part in government is to live under the government of worse men."

Fourth, we must develop an attitude of public service so that when churches, school boards, boards of health. Y.M. and Y.W.C.A.s, Boy Scouts and Girl Scouts, Catholic, Protestant and Jewish organizations, the P.T.A. and even politics call we don't assume the old T.V. slump and reply—"too busy." The answer is simply—willingness.

Some weeks ago, I wrote to the larger Community Chests and Welfare Federations in Union County asking certain questions.

From each I got a prompt and enthusiastic reply. These were the questions asked in relation to community giving:

1. The total number of doctors contacted for contributions. This was 444, a good cross section of our 550.
2. The percentage of solicited doctors who gave: 82½ per cent.
3. Number of doctors helping with solicitations ranged from 4 to 15.
4. Range of professional giving was $0 to $400.
5. Average gift was $46.50.
6. The number of agencies involved varied from 6 to 26

We must remember that $46.50 for 6 agencies represents far more per agency than $46.50 for 26 agencies. Maybe we can't all ring doorbells but we can all wring ourselves to produce greater effort. As I said, 444 doctors were solicited, the average gift was $46.50, but the really significant fact is that in every community the gifts ranged from 0 to $400. The latter is fine, but I'm deeply concerned about the former, those whose sense of community feeling is not expressed in participating in their community chest. Are these then enjoying celery hearts? Someplace between zero dollars and $46 lies a gulf in professional and community contact. There is a place for the shoulder of each of us at the community wheel. We may have to bend a bit, but the place is there.

We can't all be medical men of the stature of Albert Schweitzer, whose self-abnegation in these days is a little disturbing to contemplate. Is he really an exceptional human or just a completely unselfish person? More likely he is both. In any case, I believe he fully understands the meaning of "celery hearts."

To my successor, Dr. Carl Hanson, I commend your valiant endeavors and steadfast cooperation.

203 Euclid Avenue

James H. Mason, Jr., M.D.
Atlantic City

Primary Treatment of the Seriously Injured Patient*

No matter what his specialty, every M.D. enjoys the privileges that go with the symbols on the license tag. But not every M.D. is willing or able to measure up to the responsibilities. One of those is the skill—and the will—to give first aid in an emergency. Here the physician in a nonsurgical specialty may plead ignorance of what to do. Let him read this article. He'll find out!

The primary care of the seriously injured patient is not adequately dealt with in medical education. The intern often has little concept of what to do when presented with such a patient. The practicing physician who may encounter a serious injury only once in a long while has no formulated plan of treatment. The trained emergency squad layman probably has a better concept of what to do than many a physician.

With the potentialities of our modern methods of warfare and with our present day horsepower race, seriously injured patients will become more numerous. Physicians regardless of specialty, should be prepared to deal with them. This paper offers an outline for handling this type of case.

In the management of the seriously injured patient, preservation of life of course receives top priority. The three principal life-endangering factors are:

(A) Asphyxia
(B) Hemorrhage
(C) Damage to vital centers of the brain

Asphyxia and associated anoxia may be due to:

(1) Obstruction of the airway
(2) Tension pneumothorax
(3) Hemothorax
(4) Flail chest segment
(5) Cardiac tamponade

Careful physical examination should differentiate between these.

Primary treatment of asphyxia includes:

(1) Endotracheal tube or oral airway, especially with mandibular or oral trauma.
(2) Tracheotomy—in severe jaw and neck injuries or in unconsciousness associated with respiratory obstruction.
(3) Intercostal nerve block when pain of chest trauma produces obstruction due to failure to cough.
(4) Aspiration of chest or pericardium.
(5) Stabilization of flail chest.
(6) Occlusive dressing in a sucking wound.

Hemorrhage may be evident or hidden. Known hemorrhage may be arrested by:

(1) Compression bandage.
(2) Hemostat. If you use hemostats blindly, remember that nerves and arteries are often in close association.
(3) Tourniquets—these are useful above the elbow and knee only. Care must be taken that incomplete occlusion does not increase blood loss from the venous side. Release at intervals is not necessary. Release is best done in the operating room.
(4) Surgery may be necessary to stop hemorrhage in trunk injuries when blood replacement and other measures fail.

*Read on April 20, 1955, Annual Meeting of The Medical Society of New Jersey.

Hemorrhage is best treated by whole blood transfusion. Plasma expanders, preferably dextran, may be given while whole blood is being secured. Other general measures are the head down position, splinting of extremities, and oxygen therapy.

Damage to vital brain centers is of secondary importance to asphyxia and hemorrhage.

Possible causes of death somewhat later are: secondary shock, anuria, and infection. Secondary or traumatic shock is due to loss of extra-cellular fluid at the site of trauma. It is characterized by elevation of the hematocrit and serum protein. Fluid loss at the site of trauma should not be underestimated. A fractured femur may result in the loss of 2½ quarts of fluid into the thigh. Treatment is by whole blood and 1/6 Molar lactate-Ringers solution. Anuria is prevented by replacing fluid loss.

THE treatment of shock includes restoring effective circulating blood volume. Intra-arterial transfusion through the radial or dorsalis pedis arteries may be indicated at times. The necessary equipment and knowledge of the technic should be part of one's inventory. The intravenous route is usually adequate. The addition of a Gram of procaine to 500 cubic centimeters of blood will prevent or relieve local vein spasm sometimes caused by administration of cold blood. This modification will mean an increased blood flow. Norepinephrin is not indicated in traumatic shock. Adrenocortical extract is indicated only with adrenocortical insufficiency as when blood administration has no effect and circulating eosinophils are elevated.

Infection is best prevented during the initial treatment by:

(1) Adequate debridement of wounds.
(2) Administration of tetanus anti-toxin or toxoid booster.
(3) Surgery in abdominal trauma to prevent peritonitis.
(4) Antibiotics. Penicillin, only, is used as a prophylactic. The others are saved for later use if needed.

The acute severe head injury is usually not an emergency. A conscious patient is in no immediate danger unless hemorrhage is severe. The horizontal position is best. The "head-down" shock position may be used if necessary. Careful neurologic examination should be done. Other injuries should be searched for. This is doubly necessary if the patient is unconscious. If other injuries do not interfere, the comatose patient should be placed on his side with the hips and knees flexed, the dependent arm behind his back and the chest supported by a blanket roll; or prone with the head turned to one side. A supine unconscious patient may develop respiratory obstruction due to aspiration. An airway is often necessary. Tracheotomy may be required if unconsciousness persists to prevent aspiration of pharyngeal and salivary secretion. Oxygen and glucose are general supportive measures with cerebral trauma.

Signs of increasing intracranial pressure should be watched for. Lumbar puncture is of little value and may be harmful.

Suspect surgical clot† with one or more of the following:

(a) Unilaterally dilated pupil.
(b) Focal weakness.
(c) Jacksonian convulsions.
(d) Post-traumatic lucid period followed by impaired consciousness.
(e) Persistent impaired consciousness.
(f) Downhill course.

With serious eye injuries, both eyes should be bandaged and the ophthalmologist called.

Severe face, neck, and oropharyngeal injuries should be watched for respiratory obstruction. These patients require tracheotomy and the prone position.

The fundamental difference between the treatment of thoracic trauma and other trauma is the alteration in cardio-respiratory physiology. The object of treatment is restoration of cardio-respiratory physiology to normal or as nearly so as possible.

Peculiarities of thoracic wounds are:

(A) Bronchial secretion retention causing inadequate pulmonary ventilation due to:
  (1) Severe chest pain.
  (2) Paradoxical chest mobility or flail chest.
  (3) Depressed cough reflex due to sedation or coma.

†Subdural or other meningeal bleeding.

(B) Open chest wall (sucking wound).
(C) Tension pneumothorax.
(D) Cardiac tamponade.
(E) Massive hemothorax.

Treatment depends on an accurate diagnosis and includes:

(A) Occlude sucking wound.
(B) Tracheotomy.
(C) Aspiration.
(D) Supportive: transfusion, oxygen, and infiltration.

Pneumothorax may be "closed" if a tear in the visceral pleura causes tension. It may be "open" due to tear in parietal pleura. The seriousness of the open type depends on the size of the opening compared to the glottis. If it is larger than the glottis, a "mediastinal swing" develops with impairment of the good lung as well as of venous return. There is no more urgent emergency than this. Closed pneumothorax is treated by aspiration of the upper anterior chest and open by occlusion of the wound.

Massive hemothorax is accompanied by serious mediastinal shift and evidence of acute blood loss. Hemothorax must be considered like a foreign body occuping a vital space. The treatment is aspiration until dry or until the patient complains of a tightness in the chest. Blood may be collected in citrate for autotransfusion.

Cardiac tamponade is treated by repeated aspiration through the left xiphosternal approach.

The flail chest (depending on its severity) is treated by strapping, by skeletal traction, or by positioning the patient, involved side down, with sand bag support. Patients seem to prefer sandbagging to strapping. The paradoxical respiration of flail chest may not appear at once but with the tiring of accessory musculature after 12 to 24 hours.

Tracheotomy may be indicated with:

(A) Respiratory distress with recurring cyanosis, moist rales, and laryngeal stridor.
(B) Inability to cough effectively.
(C) Hemorrhage into respiratory passages.
(D) Prolonged coma with aspiration of pharyngeal and salivary secretions.

Infiltration of intercostal nerves is the best treatment for pain due to chest trauma. Depression of the cough reflex by sedation should be avoided. Fifty milligrams of meperidine hydrochloride* intravenously is the preferred sedative in these cases as well as in all cases of severe trauma accompanied by shock. Barbiturates may be used but not in the excitement of cerebral hypoxia. Oxygen is a necessity. A Levin tube may relieve the often associated dilated stomach which elevates the diaphragm and decreases pulmonary reserve. Whole blood is the fluid of choice in shock. Saline, especially, is poorly tolerated and may cause pulmonary edema. Prophylactic penicillin is usually indicated. Even nonpenetrating crushing injuries of the chest may result in infection due to broncho-pulmonary damage.

Criteria of satisfactory progress in the care of chest injuries are:

(A) Bleeding controlled.
(B) Patient totally resuscitated.
(C) Unobstructed airway.
(D) Stable chest wall, painless enough to allow effective cough and ventilation.
(E) No significant circulatory disturbances present.
(F) Wounds properly debrided and dressed.
(G) Pleural space being cleared.
(H) Lung expanding.

Any abdominal injury is serious. Any person with abdominal trauma, even though at first appearing to have only a slight wound, should be hospitalized since the clinical impression differs with the stage of injury. The doctor should "live with his case" until a definite diagnosis is made and definitive treatment has been carried out.

Whenever possible, diagnostic procedures and treatment of shock should be simultaneous.

Penetrating abdominal wounds require surgery with the following possible exceptions:

(A) Small stab wounds.
(B) Shotgun wounds at a distance in which surgery may do more harm than good.
(C) Patient recovering from a penetrating wound of more than 36 hours' duration.

Nonpenetrating abdominal injuries present diagnostic problems. A careful physical exam-

*More familiarly known by its Winthrop-Stearns trade-name of Demerol.

ination should be done. Thoracic cage or vertebral injuries often produce abdominal wall spasm. Absence of bowel sounds is a good sign of intraperitoneal hemorrhage or contamination. Shoulder pain is an indication for surgery. Tenderness is undependable. The symptomatology of the torn hollow viscus depends on the chemical irritating qualities of the content. The colon or lower small bowel is less likely to produce marked signs and symptoms. In the small bowel, there is frequently no large scale escape of gas due to mucosal herniation and local bowel contraction. The rectum should be examined for blood. The lumbar regions and buttocks should be examined for penetrating wounds.

X-ray examination should be made for free air and for fracture of the lower ribs, pelvis, and spine. Catheterization and urinalysis are essential. The white blood cell count is not helpful.

Insertion of a Levin tube and suction of the stomach is important for several reasons:

(A) Diagnostic aid if blood is present.
(B) Reduces shock and helps ventilation if gastric dilatation is present.
(C) Therapeutic help if a gastrointestinal rupture has occurred.
(D) Prophylactic against adynamic ileas, gastric dilatation and aspiration pneumonia.
(E) Aid in operative technic if surgery is done.

With associated severe head injuries or chest injuries and shock, the diagnosis of intra-abdominal injury may be difficult due to unconsciousness. Needle aspiration can then be a help. Aspiration of non-clotting blood is an indication for laparotomy as blood in the general peritoneal cavity becomes defibrinated enough not to clot. Aspiration is usually done at a point 3 centimeters medial and superior to the anterior superior spine on one or both sides if necessary.

Kidney injury is not usually an emergency and conservative treatment often gives good results. An intravenous pyelogram is done before surgery to prove the presence of two kidneys.

I will mention extremity injuries only by reiterating the maxim: "Splint 'em where they lie." Displaced fractures can usually be easily and painlessly reduced if seen early during the first 20 minutes after injury.

SUMMARY

THE primary treatment of the severely injured patient is directed toward preservation of life by:

(A) Preventing asphyxia.
(B) Stopping hemorrhage.
(C) Treating shock.
(D) Doing a careful physical examination to establish extent of injury so that surgery or other measures may be instituted to prevent further bodily injury.

1616 Pacific Avenue

Anesthetic Use of Carbon Dioxide

Writing in the American Journal of Surgery (87:864) 1955, W. N. Kemp points out that most anesthesiologists believe that carbon dioxide is a poisonous gas and should be immediately and completely removed from gases respired by surgical patients. The author is convinced that complete removal is not in the best interest of patients. A minimal tension of carbon dioxide must be present in arterial blood for normal release of oxygen from oxyhemoglobin. To maintain near normal ventilation carbon dioxide should be allowed to accumulate in the rebreathing bag until a concentration of about 3 per cent is reached.

Jacob Heyman, M.D.
Newark

Role of the General Practitioner in Arthritis and Rheumatic Diseases*

Except for emotional disorders, arthritis is the commonest chronic disease of mankind. Most patients will go to family doctors and Dr. Heyman here points out in highly practical fashion how the family doctor may help.

The general practitioner is well qualified to diagnose and treat arthritis and rheumatic diseases, if he has a genuine interest in the field and if he is willing to apply himself to the solution of these problems. Certainly no group of disorders touches upon so many varied fields of medical practice: internal medicine, orthopedics, neurology, anesthesiology, physical medicine and rehabilitation. It follows therefore that there is no group of diseases which requires a wider knowledge in certain aspects of these varied fields.

The rheumatic diseases are the most prevalent chronic illnesses in the United States†, with almost twice the incidence for heart disease, seven times that for cancer, and ten times that for tuberculosis and diabetes.[1] In a single year, there were 97 200,000 days lost from work.[1] Among the chronic diseases, this is exceeded only by emotional and mental disorders. A more recent report[2] supports the earlier survey, and provides an estimate of more than 10 million presumptive cases of arthritis and rheumatism, with an estimated total of 6,614,000 cases diagnosed as such by a physician. We are thus confronted with a most impressive toll of disability. In the management of this the general physician can contribute more than with any other single group of chronic ailments.

A workable classification of the rheumatic diseases may be found in the *Primer on Rheumatic Diseases*,[3] prepared by a committee of the American Rheumatism Association.

Osteo and Rheumatoid Arthritis

Osteoarthritis is the most common of all joint disorders. It is a degenerative process due primarily to wear and tear with resultant thinning and ultimate destruction of the cartilage in its most advanced form. Hence, the more physiologic term "degenerative joint disease." Unknown factors other than aging appear at times to play a part in the primary breakdown of cartilage. A simultaneous reparative process takes place, with the forma-

*Read before the Section on General Practice, Annual Meeting of The Medical Society of New Jersey, Atlantic City, April 18, 1955.

†Except for emotional disorders.

1. U. S. Public Health Service: National Health Survey. Sickness and Medical Care Series, Bulletin No. 6: 1938. Government Printing Office, Washington, D. C.

2. Woolsey, T. D.: Prevalence of Arthritis and Rheumatism in the United States, Public Health Rep. 67:505 (1952). Reprint No. 3171.

3. Committee of the American Rheumatism Association: *Primer on the Rheumatic Diseases.* J.A.M.A. 152:323 (May 23); 405 (May 30); 522 (June 6) 1953.

tion of new cartilage and new bone around the joint margins. This gives rise to the characteristic lipping and spur formation. Joints exposed to maximum stress are more frequently involved. The disease characteristically affects the middle aged or elderly. This is the so-called "primary osteoarthritis." Secondary or "localized" osteoarthritis is the same process in accelerated form. It arises in joints previously damaged by other types of arthritis, by acute trauma, or by chronic trauma resulting from postural abnormalities. In the latter group, much preventive work may be done through recognition and awareness of the dynamics of cartilagenous injury. Sound body mechanics and correction of structural derangements, weak feet, and obesity, present a ready method of attack against such developments.[4] The manifestations of degenerative joint disease are local and articular. There are no systemic manifestations, such as fever, anemia or loss of weight, no significant alteration in sedimentation rate and no serologic changes. The arthritis is usually chronic and low grade. Crippling is uncommon except in osteoarthritis of the hip, a severely disabling condition sometimes referred to as "malum coxae senilis." Synovitis is not common except in advanced arthritis of the knee joint. Patients with osteoarthritis have painful periods of varying degree. They generally respond well to rest, analgesics and physical therapy. Cortisone is of little or no value. Butazolidin® affords no striking relief.

RHEUMATOID arthritis is a systemic disease of unknown origin occurring at all ages. Most common age of onset is between 20 and 45. It affects women more frequently than men, except in rheumatoid arthritis of the spine (Marie-Strümpell type) where males outnumber females ten to one. It is a chronic progressive polyarthritis which frequently results in crippling deformities. Loss of weight, low grade fever, anemia and elevated sedimentation rate are common findings. The sheep cell agglutination test is positive in 60 to 75 per cent of cases. This is a valuable test since it may be positive in mildly active cases with normal sedimentation rates, and will remain positive in spite of cortisone therapy. The disease starts as an inflammatory process of the synovial structures of the joint, with secondary destruction of cartilage from connective tissue overgrowth. A characteristic feature in the typical case is a tendency to symmetrical polyarthritis, with early involvement of the proximal interphalangeal joints of the fingers resulting in "fusiform finger." This is due to periarticular thickening, with atrophy of the muscles above and below the joint, and contrasts sharply with osteoarthritis where involvement of the distal interphalangeal joints is more characteristic. General systemic measures, with emphasis on rest and diet during the active phase of the disease, orthopedic measures for prevention of deformities, active and passive exercises, with liberal use of aspirin, have been shown to produce satisfactory long term effects in a three year follow-up of a group of 282 patients.[5] To quote the authors, "The importance of sound basic treatment of a conservative nature must not be obscured by the more dramatic immediate effects of new remedies which cannot be maintained with safety to the patient."[5] There is nevertheless an abundance of data attesting to the value of gold therapy in rheumatoid arthritis.[6] Aspirin still remains the drug of choice as a palliative agent.

NEWER AGENTS

THE adrenal cortical hormones have a place in the management of rheumatoid arthritis and other rheumatic diseases. The results of long term therapy have been disappointing in many cases. This has been due to failure to maintain the initial response, in many instances, to undesirable side-effects, and in a majority of cases to the effects of withdrawal symptoms following discontinuance of the drug. In spite of these drawbacks, the adrenal cortical hor-

4. Hartung, E. F.: Osteoarthritis and its Management, Bulletin on Rheumatic Diseases 1:13 (March 1951)

5. Duthie, J. J. R.: The Value of Long-Term Conservative Treatment in Rheumatoid Arthritis, Bulletin on Rheumatic Diseases 4:71 (May 1954)

6. Tenth Rheumatism Review, Annals of Int. Med. 39:579 (October 1953)

mones serve as useful agents in properly selected cases. The ideal patients for steroid therapy are those in whom the disease is severe, reversible, relatively early, with a tendency towards a rapidly down hill course.[7] The chief limitation of steroid therapy is that it fails to prevent extension of the pathologic process. True remissions, with at least temporary arrest of the pathologic process, have been reported by many advocates of gold therapy.[6]

Intra-articular hydrocortisone in doses of 15 to 50 milligrams may be of benefit in rheumatoid arthritis when one or two joints are involved, particularly the knee joint. It has failed to fulfill its original promise. Long term results have been disappointing, but it is often a valuable temporary measure. Unpredictability is always a problem. Hydrocortisone is sometimes useful in acute exacerbations of osteoarthritis of the knee, and in certain self-limited conditions such as acute bursitis of the shoulder, prepatellar bursitis of traumatic origin, some periarticular lesions, and various forms of tendonitis.

Metacortandralone and Metacortandracin, two new synthetic steroids possessing the physiologic activity of an adrenal cortical hormone, have recently been subjected to preliminary study.[8] They have been found to be three times more potent than cortisone without a corresponding increase in side effects. They seem to differ qualitatively as well, since patients who failed to respond to cortisone have shown striking improvement with Metacortandracin. These drugs appear to produce little alteration in glucose tolerance. No sodium retention or potassium loss has been reported when average therapeutic doses were used. On the contrary there seems to be some increase in sodium excretion. Patients with cortisone-induced edema have, in some cases exhibited spectacular improvement when placed on Metacortandracin. Epigastric distress appears to occur more frequently with Metacortandracin than with cortisone. At present, there is every indication that Metacortandracin will largely displace cortisone and the oral forms of hydrocortisone. Untoward reactions to Metacortandracin may interdict its use in some instances.

Phenylbutazone (Butazolidin®) has been available since 1951. It is used in a wide variety of musculoskeletal disorders. It possesses antirheumatic, analgesic, and anti-inflammatory properties. The drug has a high toxic potential, and a 32 per cent[9] incidence of toxic reactions. Of these, 12 per cent were of major magnitude.[6] Twelve fatalities have thus far been reported, seven with bone marrow involvement, two with perforated ulcer, one with bleeding ulcer, one with exfoliative dermatitis, and one with a hypersensitivity reaction. Sodium retention is the most common toxic reaction. The practitioner should be on the lookout for this in patients with cardiovascular or renal disease. A low salt diet is an effective prophylactic measure. Butazolidin® apparently exerts no effect on potassium excretion. Initial high dosages may have been responsible for some of the toxic reactions. A dose of 400 milligrams daily will provide a plasma plateau level but slightly lower than that obtained through a dosage of 800 milligrams.

Most toxic reactions are noted between the first and twelfth weeks. The drug is ideal in conditions requiring only a limited period of therapy. It is one of the most valuable drugs available in the management of acute gouty arthritis since most attacks may be terminated in 48 to 72 hours. Dose may begin at 600 milligrams daily and subsequently decreased to 300 to 400 milligrams. Results in rheumatoid arthritis have not been impressive, and probably do not warrant the risks attendant upon long continued therapy. More satisfactory results have been reported in rheumatoid spondylitis of the Marie-Strümpell type. Acute periarticular lesions of the shoulder, including acute bursitis, have responded well in many instances. The drug is not of proved value in osteoarthritis.

7. Bunim, J. J., Ziff, M. and McEwan, C.: Cortisone Therapy in Rheumatoid Arthritis: A Four-Year Appraisal, Bulletin on Rheumatic Diseases 5:73 (Sept. 1954)

8. Bunim, J. J., Pechet, M. M. and Bollet, A. J.: Studies on Metacortandralone and Metacortandracin in Rheumatoid Arthritis, J.A.M.A. 157:311 (Jan. 1955)

9. Toone, E. C., Jr.: Phenylbutazone, Bulletin on Rheumatic Diseases 5:83 (Feb. 1955)

The excellent results recently reported in thrombophlebitis is indicative of the anti-inflammatory effect which it possesses. Benemid® will receive brief consideration with relation to gout.

LOCAL ANALGESIA

ANOTHER drug, which is far from new, that has been insufficiently exploited is procaine hydrochloride. Armed with but a 2 cubic centimeter syringe, 1 cubic centimeter of 1 per cent procaine solution, and a small 25-gauge needle, the practitioner can do much to reduce a number of severe, short-term disabilities. Pain is often a major symptom in many musculo-skeletal disorders, more particularly in the so-called "fibrositis syndrome." The vicious cycle of pain, spasm with more pain, more spasm, increasing disability, and ultimate deformity, may have its origin in some trifling disorder, such as a painful trigger point about the neck or shoulder. Interruption of the pain circuit often allows the process to subside spontaneously. Trigger points should be located by careful palpation and only the maximum tender point injected. An eyebrow pencil is a good marker. A cubic centimeter of 1 per cent procaine solution is sufficient for superficial infiltration. Care should be taken not to traumatize the skin or subcutaneous tissue. Two or three such injections, even one, may be sufficient to relieve the familiar painful stiff neck. Failure to inject directly into the point of maximum tenderness renders the procedure valueless. Larger quantities (up to 5 cubic centimeters) employing a 1 to 2 inch 22-gauge or 23-gauge needle, are necessary for injections into a muscle such as the scalenus anticus, or other areas such as the shoulder cuff region. Here again the point of maximum tenderness should be sought, which is often at the greater tuberosity, intertubercular groove, or in the bursa itself. A skin wheal with a hypodermic needle is desirable. The longer needle should then be introduced gently, and care taken not to traumatize the periosteum. Frequent aspirations are necessary to avoid intravenous injection. These injections may be repeated at three to seven day intervals depending upon the nature and severity of the pain and disability. The identification and elimination of trigger points around an osteoarthritic joint, such as the knee joint, is one of the most rewarding of palliative measures in osteoarthritis. This is not surprising when we consider that the cartilage and subchondral bone lack sensory innervation, and that the pain stems from periarticular structures which are richly supplied with sensory fibers. Elimination of pain with increased range of motion spell "cure" to the patient, who is utterly unconcerned with the fact that the pathologic and roentgenologic status of his joint remains unaltered.

Regional and paravertebral nerve blocks are sometimes of inestimable value. The technics of these procedures are described in text-books and may also be acquired through some of the excellent short courses in anesthesiology.

COMMONLY OVERLOOKED DISORDERS

A HEIGHTENED index of suspicion with regard to some of the less common disorders can do much towards the solution of many troublesome disabilities. *Gout* is a disorder of uric acid metabolism characterized by elevated serum uric acid levels and recurring attacks of arthritis. Gout yields readily to simple therapy. Nineteen out of every 20 cases are in males. Always suspect gout in any previously healthy individual who suffers an acute attack of articular, periarticular, or fibrositic pain of abrupt onset, with or without joint swelling or inflammation, especially when the attack subsides within three to ten days without joint residuae. A serum uric acid will usually reveal hyperuricemia and a therapeutic test with colchicine during the attack may clinch the diagnosis. A total of three to six colchicine tablets in individual doses of 0.6 milligrams at hourly or two hourly intervals is generally a good therapeutic test. Colchicine is preferable to Butazolidin® under these circumstances since, unlike the latter, it is a specific for acute gouty arthritis. The blood sample can be taken during the height of the attack, and does not have to be a fasting spe-

cimen. Serum uric acid is affected little if at all by intake of food, in the healthy individual, so that a false positive test for hyperuricemia does not present a problem except in the rare borderline case. It is important, however, that the specimen be stored in a cool, dry environment. Colchicine is successful in 95 per cent of cases during the acute stage. Some authorities consider Butazolidin® even more effective. The adrenal cortical hormones may be tried where other drugs fail.

BENEMID® is perhaps the most useful drug available for the interval treatment of gout. This promises to alter the course of chronic gouty arthritis, as well as the more serious late systemic complications of this disease. In doses of 1 to 2 Grams daily it will cause a lowering of serum uric acid and an increase in urinary excretion of approximately 30 per cent. The drug has few or no toxic effects except for occasional gastro-intestinal discomfort or skin rash. Many patients have been taking Benemid® regularly since it was first made available four years ago.

Uric acid may be synthesized within the body from simple nitrogen and carbon precursors. The gouty individual does this at a more rapid rate. The hyperuricemia of gout is thus, at least partly, explained. Obviously then, the ingestion of purines is not the sole factor in the production of excess uric acid. Rigid dietary restriction is thus open to serious question. The regular use of Benemid® will often effect a sufficient reduction in serum uric acid to permit of a more liberal purine intake.

DeQuervain's Disease is another commonly misdiagnosed condition which yields readily to treatment. It is characterized by pain in the wrist at the radial styloid, with marked local tenderness. It is due to a stenosing tenovaginitis of the tendon sheaths of the abductor pollicis longis and extensor pollicis brevis tendons. Local infiltration with procaine solution, or 15 milligrams of hydrocortone is worthy of trial in the early stages. Surgical treatment is the method of choice. Stripping of the tendon sheaths is a simple and generally successful procedure. These patients are often subjected to fruitless treatment for arthritis of the wrist. Diagnosis is readily established by the marked tenderness at the radial styloid, with severe pain and restriction of ulnar deviation of the hand at the wrist.

Patients with *epicondylitis humeri* or "tennis elbow" are likewise subjected to months of treatment on the erroneous diagnosis of arthritis of the elbow. This is a traumatic condition. It is characterized by pain and tenderness at the external epicondyle and head of the radius, with pain on firm gripping, and on extension and supination of the forearm. Mild, early cases may respond to infiltration of procaine or hydrocortone. Surgical treatment is simple, generally successful, and requires only one day of hospitalization.

THE *collagen* diseases should be considered in arthritides associated with fever, systemic manifestations, and various types of skin lesions. Acute disseminated lupus erythematosus may present articular manifestations identical with those of rheumatoid arthritis. The lupus erythematosus cell is diagnostic in this disease. Dermatomyositis, scleroderma and periarteritis nodosa comprise the remaining three members of this group. The prognosis is poor. Diagnosis is important since these diseases respond in varying degree to the adrenal hormones.

Another group of patients to be viewed with suspicion are those with severe, persistent musculo-skeletal pain which does not conform to familiar clinical patterns. Experience has taught us the need for a careful survey to rule out malignancy in these cases. Multiple myeloma is a representative example in this category.

RHEUMATIC FEVER CONTROL

APPROXIMATELY 2 to 3 per cent of untreated streptococcic infections give rise to rheumatic fever. Since rheumatic fever is precipitated by the beta hemolytic streptococcus, its prevention is directly dependent upon the control of all streptococcal infections of the upper

respiratory tract. Only by adopting such a rigid attitude towards streptococcal infections, can we hope to reduce the incidence of first attacks of rheumatic fever, as well as recurrences in rheumatic subjects. This has already been partly accomplished through the general use of sulfa drugs and antibiotics; but a systematic and well defined approach is necessary if total, or near total, eradication is to be the ultimate goal.

Penicillin is the drug of choice in streptococcal infections. Penicillin is administered with the view towards maintaining adequate blood levels for a period of ten days. This may be accomplished by an oral dosage of 250,000 units three times daily for ten days, by the intramuscular administration of 300,000 to 600,000 units of procaine penicillin every third day for three doses, or by a single injection of 600,000 to 1,200,000 units of benzathine penicillin (Bicillin®). The more versatile antibiotics are recommended only in patients sensitive to penicillin.

Continuous prophylaxis should be maintained in the rheumatic subject to prevent recurrent attacks of rheumatic fever. The recommended regimen[10] for this purpose allows a choice of (1) sulfadiazine in oral doses of 500 to 1000 milligrams administered daily throughout the year; (2) 250,000 units of oral penicillin administered in like manner, or (3) 1 200,000 units of benzathine penicillin once a month by intramuscular injection. The latter method reduces the patient's responsibility to a minimum, affords better control, and provides greater assurance of continuous and uninterrupted prophylaxis. It has the disadvantage of higher toxicity than oral penicillin, and more local discomfort than procaine penicillin. There is no evidence that benzathine penicillin produces any higher incidence of sensitivity than other penicillin compounds in comparable dosage.[11]

SURGERY IN ARTHRITIS

PATIENTS with deformed knee joints due to rheumatoid arthritis often present surgical problems. Reconstructive surgery of the knee joint, replacing the older and more disabling arthrodesis, is now possible through the preoperative and postoperative use of adrenal cortical hormones. Severe osteoarthritis of the hip is a more common surgical problem. Pain in the hip may be relieved by arthrodesis, but the elderly patient has great difficulty in adjusting to a stiff hip. Replacement of the femoral head and other arthroplastic procedures more closely duplicate the structural and functional anatomy of the hip. These are expensive, time-consuming and debilitating procedures. The long period of rehabilitation is in itself exhausting to the patient. The family physician is in a good position to evaluate the patient carefully and gauge his capacity to withstand the physical and emotional stress associated with such an undertaking. This kind of personalized assessment can be duplicated only in institutions with a medical and surgical team devoted to the study and management of such problems.

10. Committee of the American Heart Association, Inc.: Prevention of Rheumatic Fever and Bacterial Endocarditis through Control of Streptococcal Infections, *Circulation* 11:317 (Feb. 1955)

11. Stollerman, G. H.: Repository Benzathine Penicillin for the Control of Rheumatic Fever, Bulletin on Rheumatic Diseases 5:79 (Dec. 1954)

846 South 12th Street

Vomiting in Children

Chlorpromazine is an effective agent for symptomatic control of vomiting in children. When given by suppository, a dose of 2 to 3 mg./Kg. body weight is necessary to obtain satisfactory results.—Daeschner, *et al.*, Am. J. Dis. Child. 89:525 (1955).

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Newark

Isoniazid in Pulmonary Tuberculosis*

Isoniazid burst on the world more dramatically than any treatment in recent years. The glamor made it hard to analyze soberly its effectiveness In this careful and conservative study, Dr. Willner spells out what he has seen of the possibilities — and limitations—of chemotherapy in tuberculosis.

Clinical research on isoniazid therapy in pulmonary tuberculosis was instituted at the Martland Medical Center in February 1952, and after four months preliminary observations were published.[1] These new drugs were used on twenty male patients, 16 with far advanced and four with moderately advanced pulmonary tuberculosis. We soon realized that the drug has bacteriostatic but not bactericidal properties. An important therapeutic effect was exerted on inhibiting the growth of tubercle bacilli. Seven months of observation proved that even in patients critically ill with tuberculosis systemic manifestations were definitely decreased. Energy and well being began to improve rapidly and continued. Night sweats decreased in 55 per cent. Fever subsided slowly and was reduced to normal in four or five weeks in all cases but in several 101 degrees were frequently noted. Weight gain occurred in 85 per cent. Cough diminished in 75 per cent and completely disappeared in 15 per cent. Expectoration markedly diminished in 25 per cent and only slightly in the rest. Chest sinuses in two cases showed a dramatic early response with complete closure, but later re-opened. X-rays showed diminution of exudate in 25 per cent and the improvement appeared more notable in recent lesions. No cavity closure was observed although there was reduction in size of some. In two patients some improvement was noted in one lesion and progression in another in the same patient leading to the belief that the drug acted favorably against some strains of the tubercle bacillus and not on others. In this study isoniazid was started with 1 milligram per kilogram of body weight and gradually increased to 5 milligrams. A synergism between isoniazid, streptomycin and P.A.S. was also reported, although the drug alone exerted some important therapeutic effects in human tuberculosis, even in the critically ill.

After completing the original study upon which preliminary reports were based, one patient was discharged as his x-ray findings showed marked improvement, and sputa remained persistently negative. The others were transferred to the Essex County Sanatorium, where combinations of the drugs were used, and (later, in two cases) surgery. A review of these cases shows that four died. One moved out of this area, and has never been located. Five are still under treatment in hospitals, four at Verona and one on the tuberculosis service of the Essex County Overbrook Hospital. The sputa of these individuals have remained positive. Two who had surgery, one a thoraco-

*This work comes from the Newark Department of Health, where Dr. Willner is Director of the Chest Disease Division.

1. Witkind and Willner, Diseases of Chest 23:5 (1953)

plasty, the other a right sided pneumonectomy, have had negative sputa since operation. Of the eight discharged, five are arrested with persistently negative sputa. Three still show occasional positive even though x-rays reveal no apparent spread. Tuberculosis when well advanced in the lungs, takes its toll in spite of all modern therapy.

Since that time, 912 cases of tuberculosis have been treated on combinations of the drugs at the Harrison S. Martland Medical Center, formerly Newark City Hospital. Twenty-one were miliary tuberculosis, fifteen tuberculous meningitis and 876 had tuberculosis of lungs. Occasionally a patient did not act favorably under isoniazid with progression of the disease, but did improve under other forms of therapy such as streptomycin or P.A.S. An untreated patient can have a resistance against isoniazid if the infection came from a treated patient who was resistant. Resistance appears to develop much more rapidly when the drug is used alone than when in combination with other antibiotics. Caseo-cavernous tuberculosis responds better to the drugs in combination than when any of them are used alone.

Retarding development of resistance is often of vital importance so that chemotherapy can be used over a long period. Combined antibiotic therapy must be the method of choice over a prolonged period when age of the patient or extent of the disease or the general condition are contra-indications to surgery. The ideal anti-tuberculous drug should eradicate the etiologic agent. No such drug or combination of drugs is available. Observations on sputum conversion demonstrated that fewer occurred with the isoniazid alone than with combinations of the drugs, and most with isoniazid and streptomycin. Where moderate or large cavities are present, sputum conversion is rare, and even where it did occur for a time, positive cultures were later obtained.

The Public Health Service [2] says that isoniazid plus P.A.S. was as effective as isoniazid and streptomycin, and that the simultaneous use of all three drugs is not superior to a combination of isoniazid and P.A.S. They assert that the therapeutic dose of isoniazid does not increase with increasing dosage, which makes toxic reactions more frequent. Progress in the Veterans Administration study [3] in 49 hospitals indicated that "isoniazid is at least the equivalent of streptomycin and that with either streptomycin or P.A.S. may form the most powerful drug team available today."

The medical directors of all sanatoria in New Jersey were consulted as to the chemotherapy being used in their institutions. Isoniazid has been tried alone and in combination on thousands of patients in these hospitals. In three hospitals, isoniazid is utilized alone in some patients. All are using combinations, some with streptomycin, some with P.A.S., some with both. Requested to give the most effective drug or combination, one mentioned isoniazid alone; one the combination of isoniazid and streptomycin; six isoniazid, streptomycin and P.A.S. Three said that the different combinations were of equal value, and acted differently depending on the type or extent of disease. Five said that streptomycin plus isoniazid was superior; three preferred streptomycin and P.A.S. One insisted that isoniazid alone was superior to either of the two combined. The dosage of isoniazid varies in these sanatoria from 3 to 8 milligrams per kilogram of body weight. The commonest dose was 4.

The introduction of the isoniazids was so sensational and so dramatically publicized, that some patients refused to go to sanatoria. Others who really needed surgery or collapse therapy refused these procedures. Some general practitioners (and even a few chest specialists) advised that hospital care was not necessary and that the disease could now be treated while they went about doing their regular work. Several large cities were even willing to treat active, open cases of tuberculosis in their clinics by giving the drugs. Treatment of the unhospitalized patients became a routine in New York City where acutely ill patients

2. Studies on Chemotherapy in Tuberculosis, American Review of Tuberculosis 69:1 (1954)

3. Tucker, William: Address at 13th Veterans Administration - Armed Forces Conference on Chemotherapy of Tuberculosis, St. Louis, February 11, 1954.

4. Robins, A. B.: American Review of Tuberculosis 69:26 (1954)

were awaiting hospital admission. Patients recently discharged after surgery and "good chronics" were given isoniazid.

Conclusions were that this method had a definite place in the public health control[4] of cases of tuberculosis. Patients were advised to observe the same routine as previously while under anti-microbial therapy and for the most this meant full time employment. Included in this study were patients with tuberculosis not suitable for surgical or collapse therapy because of age, extent of disease or complications. A dosage of 3 milligrams per kilogram of body weight was used on 110 patients and 88 completed a course of about ten months' therapy. Complete sputum conversion by culture occurred in only 18 per cent. Conclusions were "that ambulatory therapy should not serve as a substitute for more firmly established forms of treatment, such as collapse therapy or surgery. Treatment of ambulatory patients with isoniazid when properly integrated with other available therapeutic measures has a definite place in the public health control of tuberculosis." In this study, bed rest was not stressed. Willingness to treat at the physician's office is increasing. The antimicrobials may lead to an earlier inactive status of the disease; but where activity exists, isolation and the tested forms of control must be utilized. *Treatment of the acute stages of tuberculosis by ambulatory methods has a tendency to prolong rather than check the infection.* Bed rest must be considered for its emotional as well as its physical effectiveness in the early stage of treatment. Ambulatory treatment is advisable only when (after hospitalization and treatment by rest, drug therapy or surgery) the patient remains sputum negative. Unrestricted activity in active progressive tuberculosis can do more damage than the beneficial results of modern drug therapy.

Tracing the source of infection is often an impossible task. A non-hospitalized patient can pass the disease to many susceptible individuals. Everyone in the community becomes a potential victim of a single non-isolated case. Records of the Newark Department of Health reveal many examples of spread. The story below illustrates the damage of ambulatory therapy and emphasizes that more tuberculosis results from direct contact with the family than from any other source.

A 21-year old white male, was reported on November 17, 1950 by a specialist in chest diseases. He was treated by chemotherapy, and after five months, we were informed that sputum and cultures were free of tubercle bacilli. He did full time work as a carpenter, but continued under medical supervision. He died on June 13, 1953. On Feb. 13, 1951, his 18 year old wife was reported by the same physician. She was admitted to the New Jersey State Sanatorium on February 20, 1951. She remained until October 15, 1952 when she was discharged as arrested, and has had no relapse up to the present time. Her only child died at the age of six months of tuberculous meningitis. On February 4, 1954, we were informed that his 56-year old grandfather had active pulmonary tuberculosis and a positive sputum.

Primary objective in control of tuberculosis is to prevent infection. When prophylaxis has failed and disease develops, the objective is to locate the active case at the earliest possible time and institute proper therapy. To prevent further spread of the disease, and locate as many cases of tuberculosis as possible, forms the foundation of a public health program. The average patient has a symptomless onset. Diagnosis in the early stages, before infection passes on to others, may be difficult. Caseation and necrosis may come rapidly with tissue destruction. Relapses are common. Search must continue for the symptomless as well as for the case with advanced lesions. There must be thousands in the population with open lesions serving as a source of infection who neither know or suspect it. The unknown case forms the greatest hazard and only when located and treated can it be kept under control. As long as conditions exist where the germ spreads and propagates, tuberculosis will continue. In spite of all case finding methods, many active tuberculous individuals are never located. They are not recognized or diagnosed until just before or after death and have never been under control. They wander about spreading the disease. Records of the Newark Health Department show that within the past ten years the following proportions of individuals with tuberculosis were not discovered until after their death.

	Per Cent		Per Cent
1943	24	1949	23
1944	24	1950	37
1945	20	1951	21
1946	24	1952	22
1947	23	1953	29
1948	21	1954	22

Even in this city of 440,000 where many citizens live in slums, there has been a falling mortality rate which in 1954 reached a record low of 15.3 per 100,000 population.[5] The falling death rate cannot be attributed to any single cause. Improved living standards, advanced modes of therapy, earlier diagnoses and removing the open case to prevent further spread, have all been contributing factors.

An intensive control program is as essential as any of the drug regimens. Drugs do not cause a decline in prevalence or spread of tuberculosis. They have no preventive action. Though they can check further progress of the disease, they do not replace lung tissue that has been destroyed. Eradication cannot depend on drug therapy. The stress placed on modern therapy should not distract us from the importance of case finding campaigns.

SUMMARY

1. Isoniazid is a helpful tool in treatment of pulmonary tuberculosis.

2. Chemotherapy should be used in conjunction with other forms of treatment.

3. Ambulatory treatment should not be substituted for institutional care in the open, active case of disease.

4. Improved methods of treatment demand intensification of case finding programs.

CONCLUSIONS

MODERN therapy has led to more hope for the active case of tuberculosis. Many who would have died without it now have an opportunity to survive. The infected person must be located before he can be treated. Control programs must not be diminished. This is a long term disease where relapses are frequent; hence, the problem of prevention is more important than that of arresting. Ambulatory therapy of an open case permits spread. Ambulatory therapy should be permitted only under strict supervision and preferably in sputum negative patients. Medical supervision is necessary, preferably in hospitals during the infective stage. The shortage of hospital beds should be remedied by new wards or new hospitals. Permitting the infectious patient to wander about is poor economy as spread will occur and control is difficult. Time tested programs have been an important factor in the continual dropping mortality rate and should be continued and improved rather than modified.

5. Willner, Irving: The JOURNAL of The Medical Society of New Jersey 49:364 (1952)

18 Waverly Avenue

Ethyl Chloride Inhalation During Planing

Prior to skin planing, it is necessary to freeze the face locally. This is usually done with ethyl chloride. The difficulty is that the patient sometimes inhales the ethyl chloride vapor. Grais* has an ingenious way of preventing this. He has the patient breathe through an eleven-inch length of large sized polyethylene tube, borrowing the standard mouth-piece from the basal metabolism machine. "I have used this device" says Grais, "in over a hundred surgical planings. It aids in the performing of an unhurried and smooth procedure. It also promotes the patient's tranquility."

*Grais, M.: Archives of Dermatology, 71:396, April 1955.

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Teaneck

Cardiospasm in Children

Cardiospasm in children can produce a pneumonia because of spillover of ingested material into the bronchi. The diagnosis and treatment of this not unusual condition is compactly portrayed in this article.

Cardiospasm (achalasia) is an uncommon, though not rare, condition in children. Of 601 cases of cardiospasm reported by Olson, Holman and Andersen [1] only 3 per cent were children. Moersch [2] reports 5 per cent of 691 cases were children. Achalasia has even been reported [3] in the newborn.[4]

There are several theories as to the cause of cardiospasm. Rake (cited by King [5]) describes the absence of (or degenerative changes in) the cells of Auerbach's plexus in the lower esophagus. In the newborn [1] it is thought to be the result of neuromuscular incoordination.[3] Vitamin B_1 deficiency has been suggested [6] as a factor contributory to deficiency of peristaltic action.

The symptoms of cardiospasm are those of obstruction at the cardia. In the newborn, vomiting or regurgitation of uncurdled milk is noted. In older children vomiting of the undigested food is suggestive. This may be intermittent. There is generally poor nutrition and a failure to gain weight. The sensation of hunger is usually preserved. Recurrent lower respiratory infections occur as food material overflows from the filled esophagus into the tracheo-bronchial tree.

The roentgen findings are those of constriction of the esophagus at the cardia. Fluoroscopically there may be observed intermittent relaxation of the cardia, allowing small amounts of barium to pass into the stomach. Mild cases may show only slight dilatation of the esophagus. Later cases may show marked dilatation and elongation, with loss of peristaltic action. Filling defects in the esophagus are often seen, representing retained solid food material. Plain chest films may show an air and fluid containing sac in the mediastinum, projecting usually into the right chest when the esophagus is more dilated and elongated. Several authors have reported pulmonary changes associated with cardiospasm. Lake [7] found that 10 per cent of his 124 patients showed these

1. Olson, A. M., Holman, C. B., Andersen, H.A.: Diseases of the Chest, 23:5 (May 1953)

2. Moersch, H. J.: American Journal of Dis. Child., 38:294 (1929)

3. Thomson, J.: British Archives of Diseases of Childhood, 25:121 (March 1950)

4. Haas, S. V.: American Journal of Dis. Child., 62:1118 (Nov. 1941)

5. King, R.: Journal of the Medical Association of Georgia, 42:466 (Oct. 1953)

6. Stinson, W. D.: Memphis Medical Journal, 13:300 (Dec. 1938)

7. Lake, R. A.: Annals of Internal Medicine, 35:593 (Sept. 1951)

changes. Such changes may be represented by lung abscess, bronchiectasis, pleural effusion, atelectasis, interstitial pulmonary fibrosis, and bronchopneumonia. Sutherland [8] mentions the "spill-over" syndrome with pneumonia.

Vinson [9] cites a case which recovered with no treatment and suggests conservative waiting. Several authors [10] recommend passage of catheters or sounds, and dilatation with the hydrostatic bag.[11] Of the operative procedures mentioned, the Heller type of operation [2] is the one most frequently recommended. Atropine sulfate is recommended by Haas.[4] Stinson [6] has had dramatic success with Vitamin B_1 (3000 units intramuscularly) after meals. Necheles and co-workers [12] used JB-305 (N-ethyl-3 piperidyl diphenylacetate hydrochloride), a spasmolytic, which he gave intramuscularly or intravenously, and also by mouth, with good results.

The following two case reports are examples of cardiospasm or achalasia in children seen during the past four years.

Case 1. A 10-year old boy gave a history of frequent vomiting for several months. Sometimes food eaten 24 hours previously was recognized in the vomitus. Belladonna gave temporary relief. X-ray examination (Figure 1) showed the typical conical narrowing of the cardia with dilatation of the esophagus above. Fluoroscopically the cardia was seen to relax periodically with the release of small amounts of barium into the stomach. Esophagoscopy showed a relaxed and dilated esophagus. The mucosa was intact. No obstruction was encountered at the cardia. The scope passed easily into the stomach. The gastric mucosa appeared pale, as in the esophagus. Subsequent gastric analysis showed no free hydrochloric acid in the stomach. Urinalysis was negative. Blood count showed 5.08 million red blood cells, 13.7 Grams hemoglobin, 8700 white blood cells. The differential was: Segmented neutrophils 37, nonsegmented 11, eosinophils 6, basophils 2, lymphocytes 40, monocytes 4. Three cubic centimeters of diluted hydrochloric acid were given with each meal, with complete relief. Subsequently he was kept on this p'us small doses of atropine for 3 months. There has been no recurrence of symptoms over a four year follow-up period.

Figure 1.

Figure 2.

8. Sutherland, H. D.: The Australian and New Zealand Journal of Surgery, 21:2 (Nov. 1951)

9. Vinson, P. P.: Postgraduate Medicine, 12:393 (Nov. 1952)

10. Asita Tal Som: Indian Journal of Pediatrics, 15:58 (April 1948)

11. Olson, A. M., Harrington, S. W., Moersch, H. J., Andersen, H. A.: Journal of Thoracic Surgery, 22:2 (Aug. 1951)

12. Necheles, H., Laski, H., Elegant, L. D., Baum, R.: American Journal of Digestive Diseases, 21:5 (May 1954)

Case 2. A 3½-year old boy was admitted with the diagnosis of bronchopneumonia. He had had several episodes of respiratory infection during the previous six months, accompanied by fever and cough. The past history revealed numerous vomiting episodes since infancy. More recently, cough was often associated with meals. Chest films showed peri-hilar bronchopneumonia. There was a narrow band of foamy density extending slightly to the right of the upper mediastinum. Esophagogram with barium (Figure 2) revealed a markedly dilated esophagus containing much food material mixed with the barium. The narrowed cardia showed a somewhat more abrupt change from the widened to the narrowed lumen, than in Case 1. Small quantities of barium were seen passing through the narrowed segment into the stomach. Esophagoscopy revealed a markedly dilated esophagus with loss of normal folds at the level of the esophago-cardiac junction. There was a well defined stricture, through which a number 12 sound was passed without difficulty. Urinalysis was negative. The blood count showed 4.97 million red cells, 13.1 Grams of hemoglobin, 9800 white blood cells. The differential was: Segmented neutrophils 34, nonsegmented 5, eosinophils 2, basophils 1, lymphocytes 58. There was some relief after the initial sounding, and further relief after a second sounding. He is still under treatment.

Two cases of cardiospasm or achalasia in children have been presented. The first child had a relatively early case with only moderate dilatation of the esophagus. The second case was of longer duration, showing a markedly dilated esophagus, with bronchopneumonia resulting from the spillover of ingested material into the tracheo-bronchial tree.

Among many causes of vomiting in children cardiospasm should be considered as the possible etiology. Children with frequent respiratory infections should have an esophagogram to investigate the possibility of a spillover syndrome associated with cardiospasm.

Holy Name Hospital

Tips on Tonsillectomy

In 1954, more than two million tonsillectomies were performed in the United States. Writing in the Louisiana State Medical Journal (107:91, February 1955), J. W. McLaurin and T. P. Raggio say that they do not hesitate to perform adenoidectomy and/or tonsillectomy in young children if circumstances warrant but prefer to defer surgery until after the second birthday. Adenoidectomy only is performed in children less than 20 months of age. Hemorrhage is the most frequently encountered postoperative complication. Primary bleeding is treated by ligation, suture or pack. Secondary bleeding is controlled routinely by intramuscular injection of double-strength posterior pituitary extract, U.S.P. Adults are given 5 minims every 15 minutes for three doses (total 15 minims). Children under 6 are given 4 minims every 15 minutes for three doses (total 12 minims). Prompt and permanent hemostasis occurred in 146 of 160 patients treated in this manner. Fourteen patients who continued to bleed were treated by pack, suture or ligation.

In the 1955 Journal of the American Medical Association (157:877), P. S. Rhoads and his colleagues report on bacteremia following tonsillectomy. In their series, blood cultures obtained after tonsillectomy were positive in 28.3 per cent of 68 patients. The incidence of bacteremia was reduced to 5.9 per cent in 20 patients given 600,000 to 800,000 units procaine penicillin daily 4 to 10 days before surgery. Versatile antibiotics were not as effective as penicillin in preventing bacterial invasion of the blood stream.

V. A. Alfaro in the March Medical Annals of the District of Columbia (24:119) indicates disagreement with McLaurin and Raggio as quoted above. Alfaro feels that tonsillectomy should be deferred, if possible, until the child is 4 or 5 years old. Surgery in very young children is most commonly performed to improve nasopharyngeal ventilation; therefore, adenoidectomy is the procedure of choice. Tonsillectomy involves some risk and should be attempted only by adequately trained physicians capable of dealing with immediate and delayed complications.

HERMAN W. RANNELS, M.D.
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Rupture of a Tubo-Ovarian Abscess Into the Free Peritoneal Cavity*

Rupture of a tubal or ovarian abscess into the peritoneal cavity is not common, but it is 100 per cent fatal when it does occur unless surgical intervention is swift. This is illustrated by a case here reported by Dr. Rannels.

DURING the last ten years, the subject of rupture of suppurative pelvic masses into the peritoneal cavity has been reviewed in the literature and two comparatively large series of cases were analysed.[1] Conclusions were then reached as to what was and was not adequate therapy in this serious disease complication. This accident is probably more frequent than review of the literature would indicate. Many cases go unreported. Many are not verified by operation or necropsy, probably many more than those that are verified.

Salvage is dependent upon early diagnosis and adequate treatment. It therefore behooves all who do abdominal surgery to keep in mind this complication of pelvic inflammatory disease when examining the acute abdomen in the female patient. Here is a case in point.

A 36 year old female was admitted to the Hunterdon Medical Center with a history of gradual onset of generalized abdominal pain and swelling, worse in the lower half of the abdomen beginning ten days prior to admission. During the first week of this pain there was also severe constipation relieved by taking three "Exlax" tablets on the evening of the third day before hospitalization. Moderate evacuation of the gastro-intestinal tract followed but there was no relief of the pain. The discomfort became increasingly more severe throughout the entire abdomen during the next 48 hours. Physical activity aggravated the condition. There was some anorexia but no nausea or vomiting or diarrhea. Despite this acute illness, the family physician was not called until the day of admission. Onset of menses was at age 13 with periods occurring every 28 days, lasting between five and six days with an average normal menstrual flow. Mild dysmenorrhea was occasional. The last menstrual period which was considered entirely normal began 24 days prior to her admission. She had been married 9 years during which time she failed to become pregnant. No contraception was practiced. She wanted a baby and consulted many physicians about her apparent sterility. There were occasions during her marriage when she would be aware of pain in the lower abdomen but not of sufficient intensity to cause any great concern. In 1953 she had a "cyst of the breast" removed. In 1951 a herniorrhaphy was performed.

On admission, her temperature was 100. Blood pressure was 104/74. There was a scar in the right inguinal region; the abdomen was slightly distended especially throughout the lower aspect. There was diffuse tenderness to palpation. Rebound tenderness appeared to be present below the umbilicus. I had the impression of some voluntary muscle "guarding." The percussion note was resonant throughout. Peristalsis was absent.

The external genitalia were normal. The perineum was well supported. In the cervix, the mucous plug was clear, the os nulliparous; small size, normal shape, position, and consistency; mobility decreased

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1. Miller, H. E.: New Orleans M. and S. J. 98:115 (1945) and Lardaro, H. H.: Journal of the American Medical Association, 156:699 (1954)

and tender to manipulation. The uterus was normal in size, shape, position and density. Mobility was decreased. The uterus was tender to manipulation. The left adnexal region contained an irregular mass fixed in the cul-de-sac which was very tender to manipulation. In the right adnexal region, no gross pathology was palpable. Recto-vaginal examination confirmed the presence of the posterior adnexal mass. No parametrial induration was noted.

Red blood cells numbered 4,400,000 per cubic millimeter. Hemoglobin was 14 Grams. White blood cell count was 10,000 per cubic millimeter; neutrophiles 91 per cent (59 per cent segmented and 33 per cent nonsegmented); lymphocytes 6 per cent; monocytes 1 per cent; eosinophiles 1 per cent; myelocytes 1 per cent; hematocrit 45; sedimentation 36 millimeters in one hour. Urine (catheterized) was cloudy at pH 6.0. There were no protein, sugar, casts or red cells in the urine; white blood cells, rare; amorphous urates present. Culture of pus in the abdominal cavity taken at surgery revealed no growth of organisms in 48 hours. Flat roentgenographic views of the abdomen in supine and erect position revealed normal amounts of gas in the stomach, duodenal cap and colon. In addition, a few small deposits of gas in loops of the small bowel were seen. No distention was evident. No evidence of obstruction or of free gas was seen. No abnormal abdominal calcifications were apparent.

The findings were suggestive of some material free in the abdominal cavity. Whether it was blood or pus was not certain; but that an acute surgical problem presented itself was indeed certain. Immediate laparotomy was performed.

The pre-operative diagnosis was possible ruptured ectopic pregnancy or possible ruptured tubo-ovarian abscess. The post-operative diagnosis was chronic pelvic inflammatory disease; chronic pyosalpinx, bilateral; rupture of tubo-ovarian abscess; free pus in the peritoneal cavity.

The operation included a left salpingo-oophorectomy, right salpingectomy and an appendectomy.

Free purulent material was found to be occupying the entire abdominal cavity. A large amount of it was aspirated from the cul-de-sac, from both lateral gutters, from the sub-diaphragmatic and from the sub-hepatic area. Inspection of the pelvis revealed a left tubo-ovarian abscess which extended posteriorly. When delivered anteriorly by manually freeing it from the lateral pelvic wall and the posterior surface of the broad ligament, it was noted that there was a rupture in the ovary which permitted access to the large amount of pus in the markedly indurated left tube. The fimbriated ends of both tubes were occluded. The right tube, while indurated and enlarged and very fibrotic, did not appear to be markedly distended with any purulent material.

Left salpingo-oophorectomy was performed by cutting, clamping, and ligating the left infundibulo pelvic ligament, the left utero-ovarian ligament, and the left mesosalpinx. The right ovary was in a fairly normal condition and it was not disturbed. The right tube, however, was removed. The uterus contained several subserosal fibroids about 5 and 7 millimeters in diameter. These were simply removed.

The pathologic report of the tissue removed at surgery follows.

Specimen consists of five parts. Two are gray-white, well encapsulated nodules, one of which measures 8 millimeters in diameter and the other 10. Each is 5 millimeters thick. They are very firm in consistency and on section have a gray-white whorled surface suggestive of leiomyomata. Also included was a dilated fallopian tube, 9 centimeters long and 18 millimeters in greatest diameter. The exterior has a blue-gray shiny appearance. The tube is lined by smooth gray-white tissue and contains thin brown fluid. The fimbriated end of the tube is occluded. The remaining portion of the specimen consists of a tube and ovary. The fimbriated end of this tube is also occluded. The serosal portion of the tube is congested. Four centimeters of the tube are covered by yellowish-gray exudate. Multiple sections through the tube reveal a greatly thickened wall which measures from 4 to 6 millimeters in thickness. The mucosal surface has a reddish-brown friable appearance. The wall is yellowish-white and shows a loss of its normal architectural arrangement. Attached to the tube is an ovary which measures 4 by 3 by 3 centimeters. The exterior has a faintly nodular appearance. There is a large, jagged defect on the surface of the ovary. The defect is 2.5 centimeters in length and 1 centimeter in width. On section, there is a 15 millimeter corpus luteum, the periphery of which is composed of a band of bright yellow tissue surrounding a central core of reddish blood clot. A large cystic space is present on the cut surface of the ovary. Clinging to the inner surface of the cyst is reddish-brown material. This cyst communicates with the defect described on the outer surface of the ovary.

Diagnosis: Leiomyomata: negative appendix; right hydrosalpinx; left tubo-ovarian abscess. Tissue report is benign.

Postoperative course was uneventful. There was some nausea and vomiting the first 12 hours but thereafter fluids were taken by mouth in ever-increasing amounts. Peristalsis was present the day following surgery and the patient was ambulated this same day. On the next day, the abdomen was flat and some flatus was expelled. She was discharged on the eighth day to continue convalescence at home.

Miller [1] observed that cases studied by him fell into two general groups. One group presented all the symptoms and signs of an acute abdominal catastrophe. In the second group, the symptoms and signs were chiefly those of acute pelvic inflammation. In the first group the exact time of rupture is usually evident. In the second group it is usually impossible to tell. The case here reported falls in the latter classification. However it is possible that the powerful laxative played a part in the rupture. Whether the purgative precipitated rupture, or whether rupture had already occurred and was

merely aggravated by the medication, it is not possible to say. There seems no reason, however, why a strong laxative under such circumstances would not have the same deleterious effect as it has in appendiceal inflammation. This is especially true where the abscess is in the left adnexal region as is usually the case, and thus in close apposition to the sigmoid.

Without operation the mortality in spontaneous rupture is 100 per cent [1,2] and unless operation is done very promptly, the surgical mortality is also high, varying from 20 to 100 per cent. Prognosis according to Martz and Foote [2] is dependent upon: (1) the general state of the patient, (2) the time of surgical intervention, (3) the nature of the operation instituted and (4) to a lesser extent, the bacteria present at the time of perforation.

2. Martz, Harry and Foote, Merrill N.: Am. J. Obst. & Gynec. 36:1009 (1938)

SUMMARY

1. A case of rupture of a tubo-ovarian abscess into the free peritoneal cavity is presented.

2. The early symptoms may be those of pelvic inflammation in an acute stage.

3. Purgation may precipitate rupture of the abscess.

4. This complication of pelvic inflammation has a higher incidence than a review of the literature would indicate.

5. Mortality is 100 per cent without surgical intervention.

6. Most patients die in whom surgery is delayed more than 48 hours after onset of symptoms.

7. Minimum surgery (as unilateral or bilateral salpingectomy) reduces mortality.

Hunterdon Medical Center

Should We Breed Human Beings?

Man has within his grasp more power to change future generations through breeding than he has wisdom to direct changes for the best results. So says an editorial in the August 6 (1955) *Journal* of the American Medical Association. Genetics offers the possibility of changing the race. However, no means for improvement of human stock has yet been devised.

There are many difficulties, resulting largely from the complicated behavior of genes, the biological factors which determine heredity. Thus it may be possible to control one gene, but it is hard to tell how it will be influenced by other genes. The effect of a gene may depend on the company it keeps.

Another problem is the inability to predict long-term results of manipulating genes. Selective breeding, as in animal husbandry, has been suggested as a method of improvement, but this is not likely to gain wide acceptance because of the violent emotional reactions such proposals automatically arouse.

"The widespread use of a 'perfect doner' through artificial insemination might lead to too great uniformity in a world where diversity is still highly desirable," the editorial said. And, of course, such a donor might spread recessive bad traits through a large segment of the population before they could be detected. Inbreeding, as has been shown in the past by various royal families, brings hidden traits into the open. "If these are harmful, as they are more often than not, inbreeding will increase the number of persons afflicted," the editorial said.

The proportion of persons with mental and physical defects is increasing in modern civilization because advances in medical science make it possible for them to live longer. And none of the measures advocated to prevent degradation of human stock, such as sterilizing mental defectives, have "made more than a feeble impression on the problem as a whole."

While physical traits are more nearly determined by heredity, they are less influenced by environment than are mental traits. "Social traits or personality, although affected by heredity, are altered by environment with the greatest ease."

The editorial concluded, " . . . it is easier to define good environment than good heredity. So far, the power to change man genetically exceeds the wisdom needed to know in what direction genetic controls should be applied to achieve the best results."

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Dermatitis and Fabrics

In this veritable monograph on industrial dermatology in the textile field, Dr. Braitman calls attention to a common type of dermatitis in New Jersey and suggests diagnostic and therapeutic technics.

SINCE 1940, many investigators [1-12] have reported outbreaks from processed fabrics. Schwartz *et al.* [1] say that the principal causes of dermatitis in these fabrics are the dyes, finishes and mordants used to give luster, color, softness and wearing qualities. For the past few years, the reports have been few, due perhaps because the processors have removed the principal agents responsible for dermatitis. However, during the same interval, an increasing number of reactions to synthetic and processed fabrics have been noted, especially in industry.

Northern New Jersey and adjacent New York City are centers of the embroidery industry in the United States. Here, several hundred plants embroider fabrics received from nearby dyeing and finishing mills. These fabrics are shipped to dress and underwear manufacturers, in the main, who in turn, send the finished products all over the country. Previously, the fabrics were usually silks, rayon, or cotton. Of late the emphasis has been on nylon and ninon. The reactions reported below are with these synthetics, as well as with some of the older fabrics.

Case 1. A nineteen-year old girl is an examiner in an embroidery plant, handling nylon and ninon. She developed an eruption starting at the left thumb. It became worse, spread over the entire hand and onto the right hand and forearms. Penicillin and tar ointments were found irritating. She had a fine, red, papular eruption on the dorsa of both hands, on the forearms and cubitals. She stopped work for ten days. Mild ointments, soaks and x-ray therapy were helpful. She went back to work after improving. However, her hands "broke out" again soon after handling ninon. A patch test with ninon gave a three plus reaction; it also caused the left thumb to flare. She was advised to wear gloves at work. The condition cleared and she remained safely at work. The left thumb was the last area to clear.

Case 2. A 57-year old woman was an operator on wool and nylon sweaters. She had erupted three weeks before with a severe itching rash. The skin was red, dry and scaly on her face, neck and chest. Eyelids were puffed and oozing. She was started on routine treatment and improved, remaining at work. One week later she flared severely, after working only on wool. Patch tests with wool and nylon gave a one to two plus reaction to nylon; tests with nail polish and hair wave lotion were negative. She continued working. The skin improved slowly, except for the eyelids, which reacted on and off. At one point, she was forced to stop work for three days. On return to work, she handled only nylon and by the end of the first day, the face, neck and arms became very itchy. Her face continued to swell, especially in the morning, shortly after starting work. After an interval, she was forced to stop work again — this time for three weeks. On return to work, she reacted as before, especially on the face and eyelids. She was finally taken off nylon completely and

1. Schwartz, L., *et al.*: Journal of the American Medical Association, 115:906 (1940); *also*, Journal of Investigative Dermatology, 4:459 (December 1951); *also* Pennsylvania Medical Journal, 87:87, (June 1950); *also* Medical Annals of the District of Columbia, 22:179 (April 1953).

put on cotton goods. After one month, she cleared completely and had no further outbreaks.

Case 3. A 25-year old woman was a "forelady" in a doll wig factory. Originally, the wigs were made from hair. Later, Saran was used. She reacted severely on the fingers and hands from Saran. She was treated, cleared and promptly erupted again on handling Saran. Repeated patch tests were strongly positive. In time she was not able to handle hair, although hair had previously caused no trouble. After four severe outbreaks, she was forced to give up her job, since the slightest exposure caused a severe flare, not only on the hands, but also on the face from Saran and hair dust.

Case 4. A 47-year old woman was a shuttler in an embroidery plant. She broke out with large bullous lesions on her right arm in November 1952. She stopped working and improved with treatment. Three weeks later, she suddenly erupted on the left arm. The condition cleared and she returned to work after an absence of two months. Within two weeks, the arms became very itchy. The patient was handling a great deal of organdy. Patch tests gave a three plus reaction to organdy and a two plus reaction to nylon. She remained at work but erupted on and off; a new feature was severe reactions on the face and eyes, especially after handling organdy, a contact from lint as well as from the material itself. In May 1953 the right arm and face erupted especially severely and she was forced to stop work. In July 1953, she returned to work and one week later broke out behind the right leg and popliteal space. She kept on working and the leg improved. There were occasional irritations on the right arm, when working with exposed bare arms. In November 1953 she again flared severely on the arms and forearms. Patch tests were repeated at this time and results were as before. She continued to improve and there were no further outbreaks. In February 1954, she developed pneumonia and was home for two months. During this time she stayed completely clear. She returned to work and one week later, the face again became red and swollen. She improved. She has remained at work avoiding organdy and nylon. She has been well to date.

Case 5. A 39-year old woman was employed as an operator in nylon sweaters. She developed a severe itching, oozing, and crusted rash on the right hand. This soon spread to both arms and to the neck. She had a red, dry, papulo-vesicular eruption on the hands, fingers, forearms and sides of the neck. Patch tests revealed a one to two plus reaction to cotton mixture and a two plus reaction to dyed red and blue nylon wool. She went back to work after an absence of three weeks. She handled no nylon and did well for three more weeks. Then she again began working with nylon sweaters. Within one day, she began to itch on her fingers and a rash developed progressively on the fingers, hands and arms. She was taken off nylon and given only cotton and zephyr wool. She improved. Two weeks later, she handled nylon again and reacted. She was patch tested with new nylon yarns and reacted to wine but not to black or green. She was given protective clothing and did well, except for reactions on exposure to nylon. Finally, she was taken off nylon completely and continued to improve, both while on vacation and on her return to work. She was discharged from treatment as completely cured after a total period of observation and treatment of six months.

Case 6. A 40-year old embroidery manufacturer complained of an itchy, burning dryness of the index fingers and thumbs. At work he examined synthetic embroidered piece goods, feeling the material and passing it through his fingers. When on vacation, his fingers cleared and recurred promptly on return to work.

Several cases similar to this were seen, involving not only the fingers but also the forearms.

A second class of cases was seen as follows:

Case 7. A 20-year old woman began to itch in the axillae. A rash developed and spread to chest and back. She had purchased several nylon brassieres prior to the outbreak. When she stopped wearing these, the itch cleared.

Case 8. A 23-year old woman complained of itching on the breasts, abdomen and thighs. It was an urticarial type of reaction with the skin red and slightly swollen. The patient had been wearing a new nylon brassiere and new panties. The condition cleared when these garments were discarded.

Case 9. A 34-year old woman had been itching in the axillae for a month. She stopped all deodorants. The itching became worse. The involved areas were red and swollen. Patch tests with deodorants were negative. Dress shield and elastic dress shield each gave a two plus reaction. She was treated and improved. One month later a large abscess developed in the left axilla. This was incised and drained. She then developed recurrent small abscesses and irritation of the axillae. She had avoided all known contactants. She then recalled that the original itching began following the wearing of new nylon slips with lace edges and a new nylon brassiere. These garments she was still wearing. They were ordered discarded and there have been no complaints to date.

Case 10. A 50-year old woman erupted on the abdomen and thighs two months previously. She complained of severe itching and discomfort. The rash would last several days, then clear and again recur. She had purchased a new garter belt prior to her original outbreak. Patch tests gave a four plus reaction to black nylon, to black elastic satin (nylon?) and to white elastic. She was treated and cleared. The garments were discarded.

Case 11. A 40-year old woman complained of severe itching on the calves of one month's duration. She had dry, irritated skin, and swelling of the legs and feet. Treatment included gauze dress-

ings on the legs. She improved but flared one week later after wearing nylons. Several days later she began to itch on the buttocks and abdomen, after wearing nylon panties. Cotton garments were tolerated with no discomfort. She was told to avoid nylon. This she has done to date with no discomfort.

Case 12. A 24-year old woman complained of severe itching on her back and breasts. She had worn a new nylon blouse and brassiere.

Case 13. An 18-year old girl had dermatitis of the breasts. Examination revealed a full outline on the skin from lined nylon cups which she had been wearing.

Case 14. A 35-year old woman complained of severe itching and irritation in the axillae. This followed the wearing of a new nylon brassiere. An axillary infection developed which required incision and drainage. Several weeks later she had irritation of the groins, vulva and interguteal fold. She had been wearing new lace-nylon panties.

Case 15. A 19-year girl was seen for dermatitis of the buttocks from a rubber Latex girdle. This outbreak was followed two weeks later by dermatitis on the chest from a nylon brassiere.

Case 16. A 45-year old man complained of an itching rash on the back of the thighs and calves. He had a patchy red eruption. He had purchased new car seat covers, a mixture of nylon and Saran. Patch testing with this material gave a positive reaction.

These patients were seen within the past two years. Many have a history of repeated outbreaks, of varying degree of severity. Along with the workers, I have also seen a number of patients with reactions on the body, from garments made from similar material. This problem is seen in the plant worker and in the ultimate consumer.

In the embroidery plant, the work is divided into various phases, such as shuttlers, menders and examiners. Shuttlers attend to the bobbins while the machine is running. Menders use sewing machines to fill in missing or defective patterns. Examiners handle the finished product. In each plant hundreds of yards of material are processed each day. Skin reactions have been observed in all these employees. The sites of exposure are the common sites of outbreak, such as the face, hands and forearms. Many of these people work with bare exposed arms, pulling the material along as they examine, adding friction to the hazard of repeated exposure to the fabrics.

The finishes used in embroidery fabrics fall into three groups:

1. Dyes
2. Resins, used on nylons and ninons
3. Starches, used on cottons such as laces, organdies and piqués

Dyes. According to Schwartz [1] natural dyes have not caused dermatitis. Synthetic dyes are the ones most often used. In themselves they are harmless. Dermatitis may occur from faulty dyeing or from individual idiosyncrasy.

Resins. The common resins that are normally applied to fabrics are as follows:

1. Vinyl resins
2. Melamine resins
3. Urea Formaldehyde resins
4. Melamine Formaldehyde resins
5. Alkyd resins
6. Styrene resins
7. Acrylic resins

The larger manufacturers, in response to my inquiry, said that before any of their fabric finishes are sold, they have been subjected to severe "prophetic patch testing." The method is a modification of that suggested by Schwartz [1] and consisted of applying the treated material to the skin of several hundred subjects for one week. The patches are then removed. Reactions, if any, are noted. The site of application is marked. At the end of the second week, identical patches are reapplied at the identical sites and again left in place for seven to ten days. No finishes are marketed unless they have been reported as completely negative for both primary irritant and sensitivity properties. No company knew of any instance in which dermatitis occurred, if such fabric finishes were applied with the procedure recommended in their technical bulletins.

ONE manufacturer produces two groups of resin finishes. One is a series of aqueous dispersions of acrylic polymers and co-polymers; the other group is a series of water soluble urea-formaldehydes and modified urea-formaldehyde resins. He has been selling these resins to the textile industry for many years. Millions of yards of fabrics had been finished with

them. He says that he has yet to have any complaint of adverse skin effects. Plant operating personnel have been working closely with these resins for many years and there have been no reports of dermatitis from the plants.

Another manufacturer produced finishes of urea formaldehydes, vinyl emulsions and alkyd resins. He reported no dermatitis on "prophetic patch testing" of one thousand people. He had no reports of dermatitis when the finish was applied to the fabric in the proper manner.

However, the United States Public Health Service, in a communication to me on resins used in fabric finishes, stated that all these materials have been reported as causative agents for contact dermatoses. Completely condensed or polymerized resins rarely cause contact-type eczematous dermatitis. When the resins are incompletely condensed or polymerized, however, it is not unusual for them to serve as etiologic agents in contact dermatoses.

Many of the materials manufactured by the chemical houses are sold to a finishing company, who in turn will mix them with other materials to produce a certain desired finished effect. The combination of these will sometimes cause a rash, whereas either one of the chemicals used alone will not.

Several manufacturers will not guarantee against dermatitis effects, even though these tests have proved that the chemical will *not* cause skin irritation. The reason for this caution is that some people are hyper-sensitive. The claims for their products go just so far. The rest of the responsibility is up to the user. The reason is that the method of applying, mixing and after-treating of these materials is variable from user to user.

Cotton cloth fresh from the loom is seldom sold in the original state. It is bleached, dyed or printed and subjected to "finishing" treatments. The finishing procedure varies with the fabric and its intended use. Cottons are treated to resist wrinkling, crushing and creasing. Other agents give water-repellent, flameproof or other special finishes. The finishing agents continuously employed are starches, flour, dextrins, gums, talc, china clay, magnesium sulfate, magnesium chloride, sulfonated oils and fats. Various types of synthetic resins, water and alkali-soluble cellulose derivatives, fatty alcohol sulfates, quarternary ammonium compounds and other finishing materials are used more and more. Sometimes oily or greasy substances such as oil, tallow, glycerin and paraffin are used to soften the texture of the cloth, especially if the finish is too stiff. To prevent mildew, antiseptics such as zinc chloride or formaldehyde may be added to the sizing. The various finishing compounds are employed alone or in combination with one another to impart stiffness, softness, body, flexibility or other desired characteristics. Sized cotton cloths include organdy, piqué, aetz, costume cambrics, sheeting and mosquito netting. After they are bleached, dyed or printed, fabrics may be given a stiff, polished or glazed surface. Starch, glue, or shellac may be used to stiffen the fabric. Cornstarch in itself has not caused dermatitis. Some processors add gum to the cornstarch. Many of these are ester gums, which are combinations of natural resins (such as rosin) with glycerine. They can be made by combining rosin with glycerin or directly from a combination of glycerin with oleo-resin. Rosin is one of the chief irritants in adhesive plaster.

Cottons are treated to resist crushing, wrinkling and creasing. A synthetic resin may give cottons resiliency. The principal resins are: (1) phenol formaldehyde, (2) urea formaldehyde and (3) acrylic resins. Urea formaldehyde is used on light colored fabrics. Phenol formaldehyde is for dark fabrics. Acrylic acid forms a precipitation on the fabric which adds strength, elasticity, and durability. A resin may be applied during the dyeing process or immediately after the dyeing when the dyes are dried. These resins are often mixed with plasticizers and stabilizers. All of these agents can be primary irritants and sensitizers. Some finishes are partly or totally removed by laundering; others remain more or less permanently in the fabric.

In determining causal relationship in these reported cases, the following conditions may

be taken into consideration: the sequence of events, the history, the rash, development of the clinical picture, repeated observation, and patch test results. The positive test may be assumed to be the causal agent. A negative result cannot rule it out. Some patients were not tested because the material was no longer available. Opinion as to causal relationship in untested cases was ascertained by the sequence of events. It is an opinion based on probability. It cannot be proved to the point of certainty.

In industrial cases, reactions observed were principally on the sites of exposure — hands, arms, face, whereas with the finished product, areas of irritation, friction and sweat, such as the axillae, breasts, groins, abdomen and legs were the sites of outbreak.

Heavily sized cottons such as organdy, caused a reaction in one case, although other cottons were handled.

Few cases of stocking sensitivity from nylon are seen today. Men who react to socks are seen from time to time. I saw a dermatitis of the hands of many years' duration in a dry goods merchant who reacted to mercury on routine patch tests. He was assumed to be reacting to mercury compound sizing used on linens.

Considering the thousands of employees in textile and related industry plus the ultimate consumer, it is surprsing how few cases of reaction are reported. Nevertheless, sensitization does occur and must be kept in mind. Many of the eruptions will suggest the diagnosis; sequence of events, testing and removal of the offending agents may prove the point in hand.

412 Sixtieth Street

Excess Hair in Women

The phrase "tearing the hair" as a manifestation of anger is truly appropriate for women with abnormal hair growth. Weed* points out, hirsutism "in women naturally causes considerable emotional discomfort and not infrequently is their principal reason for seeking medical assistance."

Hirsutism is classified into three types.* *Lanugo,* is the very fine hair covering of the newly-born baby. It usually disappears within a few weeks but may persist into adulthood, as in "dog men." This is unaffected by endocrines. The second type is *ambosexual.* "Its distribution is confined to the axilla, pubic region, and scalp. This is affected by hormones and disappears or is reduced in quantity and thickness . . ." in certain endocrine dysfunctions. The third type *sexual* hair, is that characterizing the sex such as the male beard. Changes in sexual hair growth "are apparently of endocrine origin since they do not occur after castration in the male."

Although 30 per cent of all females have some heterosexual hair growth, only 10 per cent are sufficiently hirsute to be disturbed by it. The commonest hirsutism occurs after pregnancy, at puberty or at the menopause. These women are generally brunettes with a strong family history of increased hairiness. Italians, Syrians and Jews appear especially to be prone to hirsutism whereas Negroes, American Indians and Asiatics rarely are.

Hair growth may manifest an underlying disorder such as concussion, encephalitis, multiple sclerosis or disease of the adrenal glands or ovary. In most instances, the hair growth regresses to normal following recovery from the disorder. In the case of adrenal or ovarian tumors, surgery and/or the administration of hormones subsequently may retard the hair growth in the treatment of the tumor, but "Unfortunately, the abnormal hair growth has never entirely disappeared in our patients."

*Weed, J. C.: Management of hirsutism in the female, American Journal of Obstetrics and Gynecology 69:1348 (June) 1955.

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Current Trends in Psychotherapy*

In these few pages, Dr. Gutheil gives us a rapid rundown of dynamic psychotherapy from Freud to Fromm, and points out what all this could mean to the alert general practitioner.

In the first half of this century, the psychiatric thinking of the western world received its most powerful stimulation from the contributions of one man: Sigmund Freud.

Freud's psychoanalytic method helped to replace the existing descriptive and inventorial concepts of psychiatry by interpretative and dynamic ones. A useful new vocabulary was created to describe the mental reactions and mechanisms for which adequate terminology had not existed before. New approaches were inaugurated for the understanding of and therapy of various types of emotional, psychosomatic, behavioral and sexual disorders. New psychiatric fields were exposed to further research. Freud's basic work on the structure and development of human personality fertilized studies on child psychology and opened new vistas on progressive education and prophylaxis of mental disease.

Freud's theories, at first rejected by most academic psychiatrists, gradually overcame resistance from the profession and the public at large. The two World Wars, with their increased demands for mental rehabilitation, decisively contributed to the growth of dynamic psychiatry in the western world.

Freud's basic theories of the unconscious and of repression have withstood the test of time. Modern psychiatrists consider as incomplete and unsatisfactory any attempt to understand psychiatry without taking into consideration the influence of the unconscious on the psychic processes. The debate which is still going on in various centers of learning today, involves theoretical questions, concerning the ratio of conscious and unconscious factors in a given disorder, the part instincts play in the psychogenesis of mental disease, or the validity of the libido theory. But there is little resistance today to the acceptance of a psychodynamic approach to psychiatry.

The psychoanalytic method itself was subject to various reforms and modifications. Trends toward such reforms have existed within the standard psychoanalytic movement from its very beginning, but the renegades were kept out of the orthodox fold.

The esoteric trend of freudian analysis, especially in its early phase, can be explained by the need of Freud and his followers to consolidate their scientific efforts in the face of mounting antagonism by academic psychiatry. It is regrettable, however, that this esoteric need has never been fully abandoned, and that it is felt by some members of the freudian group even today, at a time when psychoanalysis has *de facto* succeeded in breaking down most of the barriers of the medical profession. Today, especially in the United States, psychodynamically oriented psychiatry has become a part of the standard medical curriculum. Many mental hospitals require from the residency candidate, a certification in dynamic

*Read at the 189th Annual Meeting of The Medical Society of New Jersey, April 20, 1955.

psychiatry, and—in some cases—even proof that the candidate has undergone didactic analysis.

In the course of its development, the psychoanalytic movement gradually split into three main groups, which we may designate as (1) the Freudians, (2) the Para-Freudians and (3) the Neo-Freudians.

The first is the standard school, which continues to cultivate Freud's views in an orthodox fashion, and follows his therapeutic technics almost without change. Only a few of the old members of the group dare to criticize the uniformity and inflexibility of the orthodox method, the discrepancy between invested time and the results obtained with the standard technics, as well as the general vagueness of their "effectiveness" statistics. The rest of the group watch the critics in their midst with suspicion and are always ready to toss the dissidents overboard.

The para-freudians comprise the schools of the early deviationists, Alfred Adler, and Carl G. Jung. Alfred Adler is the originator of the school of "individual psychology," while C. G. Jung's school is united under the name of "analytic psychology."

Permit me to describe these schools in an aphoristic fashion. Adler's "individual psychology" is a psychology of group behavior, in its core a social psychology. It proceeds from the supposition that emotional maladjustments are due to the over-compensation of specific organ inferiorities. Contrary to Freud's analysis of the unconscious (the id), Adler's psychology concerns itself predominantly with the functions of the consciousness (the ego). Because of their accent on the ego, Adler's ideas have recently experienced a brisk revival. Freud was so preoccupied with the problems of the unconscious and the influence of instincts on the personality that the conscious part of the personality, the ego, was not subjected to his searching scrutiny until relatively late. His daughter, Anna, and, after her, Rado, Federn, Kardiner and others approached this problem from the psychoanalytic standpoint.

Modern analytic approach includes the exploration of both the id and the ego.

Adler never believed in the existence of a sphere in the human personality which is in any way unconscious. He spoke of the patient's "style of life," his "secret life goals," and of various "means of avoiding neurotically the responsibilities of living." (Neurosis, according to Adler, is "an alibi for avoiding the demands of reality.") What "libido" was in Freud's concept, was to Adler, an expression of a drive for power and domination, which he considered as inherent in mankind.

Adler's therapeutic goals were (a) the adjustment of the individual to the "group," (b) development in the patient of a feeling of belonging to the group ("Gemeinschaftsgefühl"), and (c) overcoming by the patient of his neurotic desire for domination.

Adler's followers form the "International Society of Individual Psychology (Adler)." Adler's daughter, Alexandra Adler, M.D. is its president.

Adler's demand for a more permissive attitude toward children, an attitude designed to bolster the children's feeling of self-confidence, has been a model for all modern educators. His influence on the educational system of the western world is undeniable. His views were less successful in the medical world which considered some of his non-biologic concepts (*e.g.*, that sex is but an expression of the drive for domination) as unacceptable.

Jung divided the unconscious into two parts: personal and collective. He called "collective unconscious" that part of our unconscious which represents racial heritage and is linked to the unconscious of mankind. It consists of primitive fears and other primordial reactions, and expresses itself in symbols of general validity ("arche-types"). According to Jung, pathologic reactions ensue if conflicts between the individual's conscious and his collective unconscious remain unresolved. Unconscious material then tends to overwhelm the individual and forces him into reactions at variance with his conscious will. Jung considers conflicts with the collective unconscious as more pathogenic than those with the personal unconscious.

To Jung, "libido" represents a primordial vital energy, a driving force of life itself. While it includes the sexual energy, it is not

identical with it (as in Freud's libido); Jung's libido is essentially non-sexual.

Jung's followers belong to his local "Analytic Psychology Societies."

A number of schools of psychoanalysis are included in the neo-freudian group. They accept or emphasize some of the basic freudian concepts, but also show distinct deviations from many orthodox views. These deviations involve technic, theory, and scope of psychoanalysis.

Reforms in technic were adopted by Sandor Ferenczi, Wilhelm Stekel, Franz Alexander, and others. The trends represented by these workers concern themselves mostly with the duration of the psychoanalytic treatment and with the details of its technic. Ferenczi and Stekel attempted to render psychoanalysis more "active" and flexible. Stekel and Alexander criticized the cumbersome standard technic, the need for daily sessions, the prolonged artificial retrogression and introspection fostered by the orthodox method, and proposed abbreviated and activated procedures.

Stekel was the first to point out (1906) that neurosis was not a result of "damming up" of libido, as Freud believed in his early days, but that behind every neurosis, a psychic conflict was hidden. Today, this view is accepted by most psychiatrists.

Stekel's main contributions to modern psychotherapy are: reforms of technic (as part of his "active-analytic psychotherapy,") practical advances in dream analysis, stress on the patient's current problems (in addition to the historic material), and the opening of many clinical syndromes to psychoanalytic exploration and therapy, such as, epilepsy, anxiety hysteria, migraine, homosexuality, and others. Stekel, who never really believed in organization, could not prevent his pupils from forming an "Association of Independent Medical Analysts" which has members in many countries.

Franz Alexander's specific contributions to psychoanalysis lie in his attempt to shorten the circumstantial psychoanalytic technic and in his psychosomatic studies. According to Alexander, some psychosomatic symptoms have specific dynamic goals (vectors) which can be grouped into acquisitive and receptive, incorporative, retentive and eliminative. His "vector analysis" explores the relative value of the specific trend for the patient's personality and for the pathologic constellation of his neurosis.

Reforms of theory and scope of psychoanalysis were suggested by Sandor Rado, Karen Horney, and Harry Stack Sullivan. These three leaders formed schools of psychotherapy based on their respective views.

According to Rado, neurotic diseases are adaptive disturbances caused by misuse of the protective devices of the ego. When the integrative power of the ego is impaired, anxiety appears. The ego makes use of "emergency measures" (anxiety, fear and pain), to ward off the threat to its integration. Under normal circumstances, the ego can protect itself from this threat. In pathogenic situations, anxiety gets the upper hand, the ego becomes paralyzed and cannot serve as an apparatus for control and adaptation. It anticipates anxiety-provoking situations and takes false and exaggerated protective actions.

For Rado, adaptation is the ability of the organism to deal with environmental difficulties. It combines physiodynamic, psychodynamic, and sociodynamic concepts.

Contrary to Rado, Horney and Sullivan, in their forms of psychoanalysis, emphasize social and cultural influences. They subordinate to them the physiodynamic aspects of mental disorders to such an extent, that some critics believe that, in this system, psychoanalysis, and even psychiatry, are considered but subdivisions of sociology. So strong is their accent on the social aspects of psychoanalysis that critics believe that these schools could no longer be considered as branches of psychoanalysis, not even as its neo-freudian modifications, but that in fact they represent neo-adlerian offshoots.

Freud considered libido as "the core of personality and the basic principle guiding human behavior." In contrast, Horney postulates two main cultural drives guiding human behavior, namely, a drive for security and a drive for satisfaction. These drives are mobilized by the individual's "basic anxiety," *i.e.*, the feeling of helplessness in a potentially hostile world. Ac-

cording to Horney, the child, to cope with its basic anxiety, and to obtain some measure of security, may develop some defensive attitudes, which are called "neurotic trends." (You may see here the resemblance with Adler's concept of the "basic organ inferiority" and its compensations.) Among the "neurotic trends" we find increased feelings of dependency, exaggerated need for attention, perfectionism, detachment reactions, all of which decrease the individual's capacity for happiness.

Horney maintains that a connection between psychodynamic and physiodynamic elements, for which Freud and Rado were searching, is not absolutely necessary. However, when she attempts to explain biologic processes as results of social developments, the theory appears to venture too far into the speculative field.

Sullivan also rejects Freud's concept of instincts and speaks of "biologic needs" (which are not identical with "instincts") and their influence on the development of the individual. According to him, the child is born helpless, but is endowed with a "power motive" (compare here Adler's "will to power") which guides its development toward security. Sullivan believes that Freud's libido theory was conditioned by the cultural environment to which Freud happened to belong; that his views applied only to his own specific cultural climate. Sullivan lays stress on "interpersonal relations" (cf. here Adler's *Gemeinschaftsgefühl*), and considers neurosis as a disturbance of interpersonal relations. (The first such relation is that of the suckling infant toward his nursing mother.)

Looking over their case publications, one is struck by the fact that neither Horney nor Sullivan make a clear distinction between *psychoanalysis* and what might be termed *psychoanalytically oriented psychotherapy*. Both psychoanalytic schools have added powerful impulses toward liberalization of the psychoanalytic technic.

The great need for psychotherapy, the relative scarcity of trained psychotherapists, as well as the high cost of the individual treatment have produced a collateral movement in psychotherapy which has shown its liveliest growth after the Second World War, namely, *group psychotherapy*. Within this movement individual subdivisions can be clearly recognized. Leading are: Louis Wender's and Paul Schilder's analytically oriented group psychotherapy; Alexander Wolf's "psychoanalysis of groups"; J. L. Moreno's "psycho-drama" and S. Slavson's children's group-and-play psychotherapy. As time goes on, almost all schools of psychotherapy are gradually developing their experimental group-psychotherapy units.

A "group" consists of three or more individuals who receive psychotherapy simultaneously. The rationale of group therapy is that the group represents a miniature world, that the individual in a group is likely to react as he does in the world at large, and that improvement of the individual's behavior within the group may prove beneficial for his attitude toward his environment. In a group, his individual sufferings emerge to be dealt with under a sort of "laboratory conditions."

Group psychotherapy is also used on a large scale in mass movements, such as Alcoholics Anonymous, Drug-Addicts Anonymous, and in some religious groups.

In addition to the value of the usual group dynamics, we may list as advantages of group psychotherapy, the facts that in the confines of the group, the patient's feelings of isolation and of uniqueness are diminished, that he becomes aware of the universality of suffering, and that through his group experience he can deal more effectively with anti-social attitudes, rivalries and hostilities.

Recently, Maxwell Jones of England recommended the creation of what he calls "therapeutic communities," socio-pathologic adjustment centers, in which doctors, patients, nurses, and the total administrative apparatus of the hospital participate.

Among the further important advances in psychotherapy achieved during the last decade are the improved technics in dealing with schizophrenia and with psychic disorders in children, as well as the application of psychoanalysis in experimental work, research, psychosomatic medicine and anthropology.

Leading in the field of psychotherapy of psychoses are Frieda Fromm-Reichmann and Gustav Bychowski. Interesting also is the at-

tempt of "direct analysis" of schizophrenics by John Rosen who interprets and reacts to the patient's symbolic productions directly and aggressively.

While these events have been taking place within the freudian movement, other psychotherapeutic trends are also gaining momentum. They include types of psychotherapy based on, or closely related to, *physiobiologic* principles.

This development rooted in the works of Weber, Fechner, and Wundt, received its theoretical foundation from Darwin and Sherrington, and its decisive propulsion from the Russian Pavlov, the American Watson and the Englishman Rivers. Their influence is markedly perceptible in the current "biodynamic" approach of Jules Masserman, in the "holistic" concept of Edward Kempf and in the "psychobiology" of Adolf Meyer. In this country, the most important of these has been the school of Adolf Meyer. In his "objective psychobiology" he used what he called a "distributive analysis" of data obtained from the patient's subjective history, from the objective psychobiologic material and from a thorough investigation of the patient's genetic and environmental factors. Meyer attempted to treat the "personality as a whole," and his aim was to educate his patient to "change the mutable and to adapt to the immutable." His method combines some of the freudian technics (such as "free association," collaboration between patient and therapist and dream analysis) but also the therapeutic utilization of projective tests, physical therapy (when relief of symptoms is urgently needed), suggestion, counselling, and any other influence which his "common-sense psychiatry" may require in an individual case. Distributive analysis is usually followed by a synthesis.

Meyer's approach was very influential in the United States at the beginning of the century. It has fertilized much psychiatric thinking and has radiated an influence which is still felt, although not always connected with his name. Thus, the new *Diagnostic and Statistic Manual of Mental Disorders** utilizes the meyerian basic concept of "ergasia" (by emphasizing the "reaction type") rather than the kraepelinian system of circumscribed nosologic entities as they were in use heretofore.

The biologic views which represent the backbone of Adolf Meyer's psychobiologic therapy have also distinctly affected current psychosomatic research. Psychosomatic medicine today accepts also the freudian concept of "unconscious motivation," but applies it in conjunction with other progressive views, such as that of "multiple causation," "integration," "homeostasis," and others, most of them contributed by workers in the physiobiologic fields.

Another new school of psychopathology is now developing around the experimental psychologists (Mueller, Dollard and Mowrer). It is concerned with the *educational* concepts of psychology. Its representatives consider mental disorders on the basis of the theory of learning. According to this view, neurosis is a result exclusively of the individual's past experiences. It is not the result of any organic damage or of inherited instinctual or genetic influences. It is essentially a reaction that has been "learned," experienced, and, not unlike a conditioned reflex, governed solely by the pleasure-pain principle. The individual seeks pleasure and shuns pain, in accordance with his past experiences. We see that here an attempt is made to combine Freud with Pavlov. The theory does not seem applicable to the total field of mental disorders, however, but perhaps to a part of it, such as that dealing with anxiety.

From all this, we see that the one-sidedness of the original freudian method has been gradually broken and that cultural, social and biologic factors are evaluated in addition to the purely psychologic concepts of psychotherapy. Furthermore, some new psychotherapeutic trends are emanating from various European centers. They are based on the *philosophical* principles and are, in essence, less "cathartic" than re-educational. They are grouped around the philosophic concepts of existentialism and are variously called "existential analysis," "fate analysis," "logotherapy," and the like. Most of these new trends hark back to Plato, Descartes, Kant, Hegel, Schilling and especially to Kierkegaard.

Heidegger, Jaspers, Binswanger, Szondi and V. Frankl are their most prominent repre-

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sentatives. In evaluating these movements which, in part, are imbued with deep religious sentiments, one cannot but feel in them the impact of the catastrophe which stormed over Europe twice within the last twenty-five years, and placed the problem of the true meaning of human existence in the foreground of the philosophers' concern.

Because of the new and, for us, uncommon terminology, the works of these authors are difficult to read and the practical gleanings of the method seem, as yet, to be meager. But time has been too short to evaluate the clinical results of the philosophically oriented psychotherapies. Looking closer upon their theoretical structures, we recognize in them many of the basic concepts of the early pioneers, Freud, Adler and Jung, although they now carry different nomenclatures.

THE GENERAL PRACTITIONER

WHAT do the individual schools of psychotherapy, especially psychoanalysis, offer to the *general practitioner?*

His main profit derives from psychosomatic research. Some years ago, the interest of the general practitioner in psychosomatic medicine was greatly stimulated by the new formulations of dynamic psychiatry.

Ever since the dawn of medical science, the conscientious physician practiced a sort of home-grown psychotherapy based on his personal experiences and on his genuine empathy with his patient. The great strides of modern psychiatry aroused in him the hope that he would be offered an opportunity to widen the scope and the efficacy of his therapeutic activity by including in it some form of systematized, scientific psychotherapy.

Alas, psychiatry has failed him in this respect—at least partly. By teaching him how to apply better diagnostic methods; by pointing out to him to what degree psychodynamics are responsible for some organic disorders (such as, peptic ulcer, hypertension and accident proneness) and by warning him, at the same time, not to apply psychoanalytic methods, it showed him—at best— a good way of "getting rid of" about 50 per cent of his patients — through referral to the psychiatrists. Obviously, this could not be a desirable aim of psychosomatic medicine—at least as far as the general practitioner was concerned.

Fortunately, this is not the whole truth. Modern psychotherapy can enrich the practitioners' therapeutic inventory. Proceeding from the supposition that at the basis of every neurotic disturbance there lies a pathogenic emotional conflict, modern psychotherapy can teach the general practitioner: (1) how to collect psychologically significant data; (2) how to understand the symbolic language of the neurotic symptom; (3) how to evolve from it relevant information regarding the unconscious motivation of the patient's conduct; and (4) having thus established the area of potential pathogenicity—how to proceed therapeutically toward eliminating the emotional conflict involved in the psychosomatic disease.

All these moves can be accomplished without applying freudian psychoanalysis; simplified methods of brief psychotherapy are available. However, they too, have to be studied. In this educational process, book knowledge is only a part. Supervised study of individual psychosomatic cases usually affords the apprenticeship experience needed for the acquisition of the necessary skills.

Modern psychotherapy is vigorously searching for new theoretical vistas and new and more effective practical approaches. Modern psychiatry is attempting to formulate the manifold interrelations of the individual in the ever changing world, in order to help him in achieving a more gratifying level of adaptation. The only stability of the system lies in the ethical values inherent in all mental therapy, in man's genuine readiness to assist his ailing fellowman with empathy and understanding. Thus, in the last analysis, behind all our therapeutic systems, behind the variegated technics and ingenious terminologies, we detect the unique, the age-old, the only *true* psychotherapy: human kindness.

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Diatrizoate* for Excretion Urography

Report of 100 Cases

Nausea, vertigo and vein cramp are the common prices to pay for excretory urography. With the development of the diatrizoate medium, it may now be possible to get excellent radiographic contrast with negligible side effects.

Until recently at the Martland Medical Center in Newark, New Jersey, we have been using the various accepted radiopaque media for excretory urography. We have had no serious allergic reactions from these media. But we did have a high incidence of minor side effects which were distressing to the patient. Among the side effects were: vein cramp, urticaria, dizziness, excessive salivation, flushing and, most frequently, nausea and vomiting.

A new radiopaque medium for excretory urography, diatrizoate sodium,* has been recently developed.[1] This is sodium 3,5-diacetamido-2,4,6-triiodobenzoate ($C_{11}H_8I_3N_2NaO_4$). It contains 59.87 per cent iodine, and is supplied in 30 cubic centimeter ampules of a 50 per cent sterile aqueous solution.

At the Martland Medical Center we used diatrizoate on 100 consecutive patients for intravenous urography to evaluate the incidence of side reactions and quality of pictures obtained. No attempt was made to select the patients. Their ages ranged from 2 to 87 years and 32 of the 100 were females.

Prior to the use of diatrizoate,* each patient had preliminary dehydration and a mild purgation with castor oil the evening before examination. In each case a test dose of diatrizoate* (1 cubic centimeter) was given intravenously and the patient observed for 20 minutes. None of the 100 patients had an allergic reaction or side effects from the test dose. The medium* was then injected intravenously as rapidly as possible through a size 18 or 20 gauge needle. Each adult received a 30 cubic centimeter dose. Children were given proportionately smaller amounts. One 2-year old child had the radiopaque medium diluted with equal parts of isotonic saline and injected intramuscularly into the gluteal muscles with no ill effects.

In my experience the best urograms were obtained 5, 15, and 30 minutes after the injection, with the 30 minute film usually having an excellent cystogram. Table 1 shows the quality of urograms.

TABLE 1.

QUALITY OF EXCRETORY UROGRAMS WITH DIATRIZOATE

Quality of Urograms	No. Patients
Excellent	72
Good	16
Fair	8
Poor	4
	100

*Hypaque (brand of diatrizoate) Sodium has been furnished by the Department of Medical Research, Winthrop-Stearns, Inc., New York 18, New York.

Note that 88 per cent of the films were satisfactory for diagnostic purposes. This represents a distinct advance in excretion urographic technic. Many of the fair and poor films include patients with poor renal function. A typical diatrizoate film is shown in the illustration.

30 year-old male with a normal intravenous urogram on the 15 minute film with 30 cc. of diatrizoate.

Each of the first 25 patients of the series had his temperature, pulse rate, respiratory rate and blood pressure checked before the injection, and 15 and 30 minutes after the injection. There were no significant changes following the injection of the drug in any of the 25 cases.

Of the patients in this series who received diatrizoate,* only 9 per cent had side effects. See Table 2. In each instance, the side effect was very mild and lasted less than five minutes. There were no severe allergic reactions. It is to be noted that of the few patients with side effects, 66 per cent had a previous history of allergy or drug idiosyncracy as listed in Table 2. Two patients who did not develop any side effects from diatrizoate* had a past history of allergic reactions from injections of other radiopaque media.

TABLE 2

SIDE EFFECTS WITH DIATRIZOATE*

Side Effects	Patients	Patients with Previous Allergy
None	91	2 Reaction to other media
Mild and transient (5 min. or less)	9	6 1 angioneurotic edema
Nausea and vomiting	6	1 drug allergy
Numbness or burning sensation	3	1 obstructive jaundice
Severe	0	3 hay fever, dermatitis
Totals	100	8

SUMMARY

1. One objection to the radiopaque media generally used for excretory urography is the development of annoying minor side effects. The most common of these are nausea and vomiting.

2. A new excretory urographic contrast medium, diatrizoate sodium,* has been studied in 100 successive patients. There have been fewer minor side effects with this than had been obtained with other radiopaque media commonly used and no severe allergic reactions. The quality of urograms with diatrizoate* is equal to or better than that obtained with other radiopaque media.

3. The excellent contrast with a lessened incidence of minor side effects makes diatrizoate* a useful diagnostic medium of the urologist and radiologist.

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Medico-Legal Aspects of Trauma in Ulcer Disease

Can external trauma cause a peptic ulcer? Can emotional stress cause it? If so, should an employer be financially liable if the emotional stress of a job is a factor in an employee's developing an ulcer? Dr. Greenfield does not have a pat answer to all these questions; but he presents some challenging and thought-provoking suggestions.

The problem of medico-legal aspect of ulcer disorders resolves itself basically into two major components: (1) the separation of fact from fiction and (2) determination of the extent of disability.

Probably no field in internal medicine presents a higher ratio of "functional disorders" than the gastro-intestinal tract. The symptom complex of functional derangements may be identical with that of organic disease. It thus becomes difficult to separate fact from fiction in traumatic ulcers. Furthermore, the real "cause" of peptic ulcer is debatable. If we take the etiology of ulcer and call it unknown X, and the patient's historical account of his complaints without objective proof as unknown Y. we find ourselves dealing with two unknown variables which mathematically may be handled effectively, but which medically always presents a contestable problem.

In attempting to establish order. Liniger and Molineus [1] established four postulates for the recognition of traumatic ulcer of the stomach and duodenum. These are specifically stated as follows:

1. The disease for which trauma is causative should not have existed prior to the specific trauma.
2. Trauma must be sufficiently severe to act as a possible etiologic factor of the disease.
3. Trauma must be immediately followed by the active symptoms of the disease.
4. Symptoms must be those recognizably belonging to the disease claimed.

Although clearly defined, these postulates present difficulties in interpretation. Strict adherence would invalidate many, if not most claims. Each postulate is open to criticism and objection. For example, the first one is "The disease for which trauma is causative should not have existed prior to the specific trauma." It is usually difficult to develop objective proof of the *absence* of ulcer disease prior to a specific trauma. In the absence of symptoms, a gastro-intestinal series is not a routine study. Very few patients can produce x-ray evidence of *absent* ulcer disease prior to trauma. Thus the acceptance of the first postulate becomes purely subjective.

To add to the confusion, the absence of symptoms is not *a priori* evidence that a previously normal gastro-intestinal mucosa existed. Autopsy findings often show scars of

1. Liniger, H. and Molineus, Gerhard: Cited by Kessler, H. H.: *Accidental Injuries*, Phila., Lea & Febiger, P. 382.

healed ulcers without previous ascertainable story of ulcer symptoms. It has been said that 5 to 10 per cent of adult males have, have had or will have ulcer disease at some time. The uncertainty of the world we live in, the expectancy of impending chaos, the depression, anxiety and tension of an atomic age all generate an external milieu conducive to increased ulcer incidents. An ulcer may exist for many years in a stage of latency and the first sign may be obstruction, perforation or hemorrhage. Even without trauma it becomes exceedingly difficult to accept the normal integrity of the gastro-intestinal tract in the absence of positive symptoms.

On the other hand, if it is assumed (as some of the continental writers or as Crohn, Gerendasy[3] or Eusterman[4] here assume) that the absence of gastro-intestinal symptoms prior to a trauma indicates a normal gastro-intestinal tract, then it is legally possible to accept the first postulate. It is my opinion that chronic peptic ulcer may occur occasionally but certainly not often. *The absence of symptoms does not mean necessarily the absence of disease.*

Postulate 2 states that the trauma must be sufficiently severe to act as a possible etiologic factor. The severity of trauma is often questionable. No one denies the causal relationship of severe trauma which induces a rupture of the spleen or liver and which can be proved by surgery or by autopsy. But to assert that a severe localized abdominal blow which produces pain and tenderness is visceral and not parietal in origin is questionable and less conclusive unless proof is forthwith coming.

Gray[2] states, "If trauma, as such could frequently cause ulcer disease there should be frequent recurrence or occurrences after gastro-intestinal surgery." There is mutilation of tissue and interference with circulation engendered by surgical clamps, sutures or clips. Yet post-surgical gastric ulcerations are infrequent. To my knowledge no one has produced a chronic peptic ulcer in the experimental animal by the repeated application of external trauma. And more emphatically, Gray[6] states that *no one has proved that an isolated trauma could produce a chronic ulcer.* Any casual laceration, tear or injury of the gastric mucosa following the application of striking a blunt force to the epigastrium shows rapid healing in man or animal. Although the likelihood of chronic peptic ulcer being induced by trauma is somewhat speculative, the *possibility* of chronic peptic ulcer disease becoming aggravated by trauma is more tenable. The resulting disability would depend on the severity of the trauma and the pathologic changes induced by the accident.

The adaptation theory of Selye[5] and current concepts of physical and emotional stress, have opened other avenues of confusion. The gastro-enterologist is well aware of the possible role of stress in initiating peptic ulcer and precipitating recurrences. The introduction of ACTH and cortisone enable Gray and his associates[6] to show that these agents as well as emotional and/or physical stress could increase gastric secretion in man. These results are not dependent on the intervention of the gastrin or hormonal mechanism or on the intact vagi.

Porter, French and their associates[7] have demonstrated in monkeys the role that the anterior and posterior hypothalmus play in gastric secretion. They have shown how a stress reaction (insulin hypoglycemia) produces effects on gastric secretion that represent a composite result of anterior and posterior hypothalmic stimulation. They demonstrated that ACTH, cortisone or epinephrin will produce

2. Gray, Irving: Annals of Internal Medicine, 7:1405 (1934) and N. Y. State Jour. Med., 44:887 (April 1945)

3. Crohn, B. B. and Gerendasy, J.: Journal of the American Medical Association, 100:1653 (1933) and Amer. Jour. Surg., 21:12 (1933)

4. Eusterman, G. B., and Mayo, J. G.: American Journal of Surgery, 26:74 (1934)

5. Selye, Hans: Journal Clinical Endocrinology, 6:2 (February, 1946)

6. Gray, S. J., Ramsey, C., Reifenstein, R. W. and Benson, J. A., Jr.: *Gastroenterology,* 25:156 (1953)

7. Porter, R. W., French, J. D., Longmeyer, R. A.: *Surgery,* 34:261 (April 1898), *also* Porter, R. W., French, J. D., Cavanaugh, E. B.: Archives of Neurology & Psychiatry, 72:267 (July 1955)

a gastric acid secretory response similar to that produced by stimulation of the posterior hypothalmus, and that the effect of ACTH or epinephrin is dependent upon intact adrenals. The cortisone effect is independent of either intact adrenals or vagi. Shay [8] and others believe that stress of chemical, physical or emotional origin acts by a neurohormonal mechanism on the hypothalmus and that impulses may be transmitted through the sympathetic chain to the adrenal medulla. Epinephrin is liberated and acts on the anterior pituitary to activate ACTH which in turn stimulates the output of cortisone and subsequently hydrochloric acid and pepsin. This complicated mechanism may explain bleeding and rupturing of pre-existing ulcers in patients with chronic peptic ulcers. But that this mechanism (or that stress of any type) can produce a chronic peptic ulcer is not proved either in man or the experimental animal.

IN LITIGATION, more and more emphasis will be placed on the "stress mechanism" induced by trauma either locally to the abdomen or to some more remote area of the body. I recently heard the "stress mechanism" invoked when a petitioner had a superficial injury to his hand while working. It was asserted that the emotionally traumatic effect of this injury caused sufficient stress to activate a duodenal ulcer. This type of teleologic reasoning would enable a workman to stub his toe, then worry about gangrene and thus activate his hormones and his ulcer. The combinations and possibilities of stressing stress are limitless. The courts could be taxed to capacity unless some line is drawn as to what constitutes a sufficiently stressful trauma to activate rather than cause ulcer disease. Selye [5] emphasizes the general and diffuse rather than the localized type of trauma in invoking the adaptation responses of shock, countershock, resistance and exhaustion. At present, it appears prudent to suggest that stress, physical or emotional, may activate pre-existing ulcer disease. Psychic stress must be prolonged or severe and repeated to invoke this reaction. Physical stress should be generalized and diffuse also rather than superficial and remotely localized to invoke the stress mechanism.

Closely integrated with this is the third postulate: the immediate development of symptoms after the trauma. The development of a rupture with surgical findings of a chronic walled-off ulcer is incontestable. The induration of the wall speaks for old disease rather than acute ulcer perforation. The same follows with hemorrhage incident to trauma even if the patient is not operated on. A tarry stool or vomiting of blood after trauma with x-ray evidence of active ulcer may point to an acute ulcer or aggravation of a chronic ulcer. Most acute ulcers heal and most chronic ulcers usually go into remission. If surgery revealed a chronic calloused wall, the latter probability would be more apparent. In the absence of surgery, the clinical course, x-ray finding, and possible gastroscopic visualization of ulcer (if gastric) with its healing would help elucidate the situation. However, when an individual states that his symptoms first appeared two to three months after trauma, the linkage becomes less secure. Here the question of emotional rather than physical trauma and the activation of an old rather than the initiating of a new ulcer takes precedence in our thinking. The longer the time interval until the first appearance of symptoms, the less clear the association.

Postulate No. 4 says that the signs and symptoms which follow trauma must be those recognizably belonging to the disease. However, functional disorders may mimic organic disease. The gastro-intestinal tract mirrors the disorder of secretion or motility whether induced by neuro-vascular factors, reflex activity or mucosal destruction. There are at least three conditions entirely independent of ulcers which may give identical symptoms of ulcer and yet in the absence of objective proof by x-ray, their differentiation may be difficult. Possibly it is true (but more risky to admit) that ulcers may be present clinically with negative x-ray findings. This could fol-

8. Shay, Harry: Personal communication to the author.

low either (a) error in the x-ray technic, (b) location of the ulcer on the posterior wall of the duodenum, or (c) shallowness of the ulcer crater which inhibits the visual filling of the crater on x-ray. Nevertheless, for valid medico-legal evidence, an ulcer should be demonstrated by x-ray.

From this analysis, we see that each postulate is open to question and subject to challenge. The presence of all four is deemed necessary for incontestable association of trauma with disease. These postulates, however, represent the best tools for any working case. Around them, turn most medico-legal ulcer problems. Complete reliance on them would force most clinicians to state that :(1) a single trauma very rarely produces chronic peptic ulcer, (2) trauma *can* cause acute ulcers and (3) trauma can aggravate pre-existing ulcers. These are the clinical conclusions upon which fact may be separated from fiction.

Before turning to the determination of the extent of disability, I present the following case study which illustrates how the facts can be gathered in ulcer disease. A thorough gastro-intestinal survey of potential traumatic ulcer patients includes gastric analysis, gastroscopy, stool studies, x-rays, and a close rapport between attorney and physician.

CASE REPORTS

Case 1. This patient had old duodenal ulcer disease first diagnosed in February 1953. After one week on a strict ulcer regime, his pain disappeared. Until the time of the accident (December 4, 1953) he had no gastro-intestinal complaints. At 11:30 a.m. on December 4, while going through a doorway carrying a 70-pound trunk, he hit the door jam. The corner of the trunk struck the patient in the peri-umbilical area. He was momentarily dazed but continued his work, carrying the trunk down to an elevator. He had to stop because of dizziness several times. He was forced to quit work because of the feeling of weakness and faintness and returned home at 1:30 p.m. At 3:30 he passed a bloody stool and was sent to the hospital. There, he was treated for ten days with an ulcer regime and multiple transfusions. He was finally operated on on December 14. The operation revealed a large penetrating duodenal ulcer. Subtotal resection was done. Subsequent x-ray showed a subtotal resection of about 60 per cent of the stomach. A second gastric analysis showed 60 units of free hydrochloric acid on histamine stimulation. He now gets occasional epigastric pain which lasts for a few days and seems to be somewhat relieved by food. He has had occasional headaches and sweats following food ingestion or even occurring without food. The rest of his family history and past medical history are noncontributory. He is extremely tense and apprehensive about his condition. He smokes at least one pack of cigarettes a day and drinks mildly.

The abdominal examination revealed a well-healed abdominal scar with no evidence of any incisional hernia. The liver and spleen were not palpable. No masses were felt. There was no superficial or deep tenderness. Peristalsis was prompt and active. No fluid was present. Rectal examination was negative.

From the history, physical examination and review of the x-rays and hospital record, I concluded that he had an old duodenal ulcer which became aggravated and actively bled as a result of the trauma of December 4, 1953. My reasons are as follows:

(1) There were no symptoms for several months prior to the accident.

(2) The trauma was of sufficient severity to incite this bleeding.

(3) His symptoms developed within a few hours after the trauma.

(4) The symptoms are recognizably those belonging to ulcer disease; and the surgical findings substantiated it.

Case 2. Prior to April 1951, this patient had had no abdominal pain, no vomiting and no tarry stools. On April 21, he bit into a piece of bread, and swallowed a bit of glass. The inner surface of the right cheek started to bleed. Next morning, after bowel movement, he noticed bright red blood on the paper. This was not present again and was not followed by symptoms of weakness or tarry stools. He returned to work that day and remained on the job until June 11. He first noticed epigastric and left upper quadrant pain three days later. This would last for about one hour and recur several times during the day. He was put on a milk and cream hourly program with antacids every two hours and other medication every six hours with no alteration in the nature of or disappearance of pain. This pain persisted throughout treatment. It was not relieved by food or soda, radiated to the upper quadrants and came ten to fifteen minutes after a meal. This was relieved as time passed. It was present on arising, but there was no night pain or back pain. For the first two or three days following the "ingestion o. glass," he vomited several times. The vomitus was not blood stained nor coffee ground. The rest of the gastro-intestinal historical survey was irrelevant. Past history and family history were noncontributory. His personal history included moderate smok-

ing with a tremendous amount of emotional anxiety and unrest.

General examination was negative. There was nondescript tenderness in the left upper quadrant, epigastrium, and left lower quadrant. It was present on both deep and superficial palpation. The rectal examination showed an enlarged papilla but no external hemorrhoids were noted. The prostate was normal.

Stool was negative for occult blood. Hemoglobin was 102 per cent.

Red cell count exceeded 5 millions. Gastric analysis revealed 22 cubic centimeters of fasting content containing 35 units of free hydrochloric acid.

A sigmoidoscope could be passed for ten inches. There were no visible defects and no blood was seen. Except for an enlarged anal papilla, sigmoidoscopy was negative.

The gastro-intestinal x-ray series showed a normal esophagus and normal stomach. Peristalsis was prompt, active and commensurate with motility. There were no intrinsic or extrinsic pressure defects. The mucous membrane was normal. The pyloric canal was negative. The duodenal cap filled completely. It was non-tender and non-irritable. The duodenal loop and jejunum were normal and in six hours the stomach was empty on fluoroscopy.

I could see no evidence of any organic disease. His complaints were functional in origin and associated with emotional instability. There was no indication of ulcer disease, either acute or chronic. Neither the bleeding from the rectum nor the abdominal complaints were due to ulcer disease. The reasons are as follows:

Against Chronic:

1. The patient never had any complaints prior to April, 1951.
2. The type and location of his pain and its failure to respond to a milk and cream program were not typical.
3. The absence of any duodenal deformity on the x-ray films.

Against Acute:

1. There was no indication of any acute ulceration resulting from the ingested glass as proved by the absence of blood or coffee ground vomitus during the early period of his vomiting.
2. The bright red blood not followed by a tarry stool invalidated any upper gastro-intestinal bleeding.
3. The abnormal symptom complex and failure of ready response to an ulcer regime.
4. The unlikelihood of glass causing a single ulceration in the stomach without bleeding or perforation in the esophagus or stomach or duodenum.
5. The failure of pain or bleeding to occur within twenty-four hours of ingestion would make any ulcer disease of traumatic origin unlikely.

This case shows how medical evidence alone was able to cast a strong web of doubt on any ulcer possibility. Although the patient was seen almost a year after the trauma and although the ulcer studies revealed a normal duodenal cap, the time interval after the trauma was sufficiently long to have allowed an acute ulcer to heal even without scar. However the historical data alone made it unlikely that ulcer disease had even existed.

At this point, let us review the application of these postulates to other adjudicative cases. Gray [2] cites a man of 37 who had never had previous digestive complaints. He was struck in the upper abdomen by a wooden plank. Within 24 hours he began to complain of epigastric pain, occasional vomiting and discomfort after meals. There was no hematemesis. X-ray studies within one month after the accident revealed changes in the duodenal bulb indicative of an ulcer of the first portion of the duodenum. Within three months, the symptoms were gone and x-ray was normal. The absence of preexisting ulcer symptoms would legally fulfill postulate No. 1. The trauma was sufficiently severe and the symptoms followed within 24 hours, so that postulates 2 and 3 are satisfied. The symptom complex of ulcer disease was expressed adequately to fulfill postulate 4. Here the rapid healing and disappearance of the x-ray defect would suggest an acute peptic ulcer induced by the trauma. Although chronic peptic ulcers may heal completely without duodenal bulb deformity, they are more often associated with evidence of residual mucosal deformity.

Gray [2] also reports a 58-year old man who fell against the radiator striking his abdomen. He had had x-ray evidence of gastric ulcer three years prior to the trauma. His ulcer symptoms had previously been controlled by diet and therapy. He was asymptomatic prior to the injury. Following the fall, there was immediate onset of abdominal pain with vomiting of food after meals. This persisted for about three to four months. X-rays within 72 hours after the injury showed a picture which suggested an ulcer in the lesser curvature of the stomach. X-ray studies three months later

revealed a normal gastric contour. Although the history and findings satisfied the prerequisite postulates, the presence of old ulcer disease (confirmed by x-ray three years previously) would suggest aggravation by the injury of a pre-existing chronic gastric ulcer.

Turning to the problem of determination of the extent of disability induced by a specific trauma, we find no organized rules to guide us. Sometimes a patient has a "functional pyloroduodenal irritability" or "gastritis" and still has a moderately disabling disorder. Take two patients, both with duodenal ulcer, both uncomplicated, both with x-ray visualization of the ulcer in the same area, both with grade three or four acid. The disability may be entirely different in each individual. Each must be analyzed and evaluated separately. The "psyche" of one may predicate a more disturbed neuro-muscular mechanism and result in a greater disability. Or, an ulcer may be present in a less sensitive individual who may be able to carry out his occupation with only slight impairment. There is no hard and fast rule for determining the extent of disability.

It may be medically acceptable to allow a varying percentage of total disability for the suturing of a ruptured ulcer and to allow a higher percentage of total disability resulting from a subtotal resection of a stomach. In the latter situation, one individual may develop the dumping phenomenon after resection without objective evidence and be a medical cripple unable to participate in either work or play. His disability is much greater than in a successfully resected stomach in a non-complaining individual. These examples could be multiplied many times.

CONCLUSIONS

1. Chronic peptic ulcer is rarely produced by trauma.
2. Acute ulcers can be caused by trauma.
3. Chronic peptic ulcer can be activated by trauma.

Each case must be weighed on its own merits in determining the quantitative extent of disability.

31 Lincoln Park

Simple Alkalinizing Agent

The common alkalinizing agents are sodium citrate or bicarbonate. Over long periods, if given in sufficient quantities, these eventually revolt the patient, and/or provoke gastric irritation. Accordingly, Eisenberg, Howard and Connor, (page 503 of the April 1955 Journal of Clinical Endocrinology and Metabolism) have developed a potassium and sodium citrate mixture. In their experience, this agent, given for recurrent uric acid and cystine stones, was well tolerated in high dosage over periods as long as eighteen months.

The solution contains equimolar parts of sodium citrate, potassium citrate, and citric acid. Each ml. contains 1 millimol sodium, 1 millimol potassium, and 1 millimol citric acid. The function of the citric acid is to increase palatability. The mixture contains per fluid ounce —2.0 Gm. citric acid, 0.3 Gm. sodium citrate, 3.3 Gm. potassium citrate. The mixture can be easily carried to work in the pocket, it is easy to measure, and it is stable and storable. The mixture may be taken diluted and as a soft drink in water or it may be taken in a teaspoon followed by water. Generally, 20 cc. four times a day has maintained a urinary pH of 7.4 to 7.6 through most of the twenty-four hours. Needs for the individual patient range from 60 cc. to 120 cc. per day. Caution is indicated where there is renal deficiency, or possibility of it, to avoid edema, hyperkaliemia, or alkalosis.

Letters to the Journal • • •

Antibiotics and the Common Cold

In last August's JOURNAL, we published an Annual Meeting paper on antibiotics and the common cold by Dr. William B. Nevius of East Orange. This appears on page 412 of that JOURNAL. Since then, we have received four letters indicating disagreement with Dr. Nevius. The letter below published is representative of the four.

Dear Sir:

The JOURNAL has been unfair to a number of physicians in printing an article[1] by Dr. Nevius under the title "The Common Cold from the Viewpoint of *The* Pediatrician." I should not criticize were the latter *the* changed to *A*, for I believe that every honest individual should be given the opportunity to present his ideas. But I resent the implication that Dr. Nevius' methods of treatment represent the feeling of even a respectable minority of pediatricians.

The first portion of the article is a melange of tradition, half truths and unprovable statements, dogmatically presented. The mid portion of the article, dealing with the admittedly promiscuous use of antibiotics should be refuted in print.

The author has enumerated his reasons for giving antibiotics; let us consider them in his order:

(1) *Antibiotics are freely available.*

So are aspirin, laxatives and anti-histamines. And all are on a parity as far as combatting the hypothetical cold virus is concerned.

(2) *The public wants them.*

Undoubtedly occasional patients leave us when we refuse to obey their demands. But we as physicians bear the responsibility of conscientious regard for the welfare of our patients. Should we sacrifice our integrity to the whim of the individual?

(3) *There is a wide choice of antibiotics which come in a number of pleasing preparations. (Sic!)*

A statement that cannot be questioned, but withal rather absurd.

(4) *". . . one great advantage of the mycins is that there are no hidden harmful effects."*

That statement is most debatable. In controlled studies it has been found that complications of grippal and coryzal infections are not warded off effectively by the prophylactic use of antibiotics and in a recent editorial[2] in the *New England Journal of Medicine*, commenting on work performed[3] on poliomyelitis patients who had undergone tracheotomy, the writer, after discussing the implications of the study, states:

> "The authors are of the opinion that, in spite of the possibility of preventing pneumococcal, streptococcal, and H. influenzal infections, the unfavorable alteration of flora that occurs when prophylaxis is attempted far outweighs the good that may be accomplished. Therefore, it is preferable to follow the bacteriologic aspect closely and use a specific agent only when the clinical condition warrants it."

If this conclusion is reached after such a study, is it not important to reassess the prophylactic administration of antibiotics in all situations except when they have definitely proved of value, and then only for highly specific purposes?

Another succinct and devastating commentary on present-day trends toward the misuse of these valuable media is expressed by Hussar.[4]

> "The indiscriminate use of antibiotics should be condemned not only because of untoward drug reactions, but also for many other reasons, among which two should weight heavily: the threat to the future usefulness of present day antibiotics and the threat to our professional standards."

Dr. Nevius also stresses the value of antibiotics in event of vomiting and diarrhea associated with "colds." This I doubt. A controlled study would be of interest. He also favors vaccine prophylaxis. Many published control studies have disproved their value.

GEORGE HELLER, M.D.
Englewood, N. J.

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1. Nevius, W. B.: The JOURNAL of The Medical Society of New Jersey 52:412 (August 1955)
2. New England Journal of Medicine 252:873 (May 19, 1955)
3. Lepper, N. H., Kofman, S., Blatt, N., Dowling, H. F. and Jackson, G. G.: Antibiotics and Chemotherapy 4:829 (July 1954)
4. Hussar, A. E.: Deaths from Antibiotics, Journal of the American Medical Association 158:1330 (August 6, 1955)

Reply from Dr. Nevius

I appreciate the opportunity of replying to Dr. Heller's communication. The doctor has expressed disapproval of certain opinions advanced by me in an article published in the August (1955) issue of THE JOURNAL. Such differences of opinion are stimulating and, if discussed calmly and objectively, they can be enlightening to both parties to the discussion.

In the original manuscript, one sentence which was deleted by the editor's blue pencil should, I believe, now see the light of day. It reads as follows: "In preparing this paper, I have not referred to a single scientific journal or medical textbook—my remarks are based on personal observation in private and hospital practice *and the experience gained therefrom.*" During the winter months from about December 1 to April 1, at least half or more of the average pediatrician's work is concerned with the prevention and treatment of the common cold, or, if it please Dr. Heller, the upper respiratory infections. (The title of the paper was *exactly* as assigned to me by the Program Chairman of the Section on Otolaryngology of The Medical Society!) An observant and conscientious doctor will use every reasonable therapeutic measure to relieve his little patients and their parents of the discomfort of this group of illnesses. The measures I recommended, I repeat, were based on personal observations made in regular day-to-day work in hospital clinics, wards, and private practice. They were recommended because they were found to be *practical and effective.* If we brush aside aspirin, antihistamines, and antibiotics, what are left with which to treat respiratory illnesses? Bed, rest, forcing fluids, cough medicines, foot baths, mustard plasters, and flaxseed poultices! That indeed would be horse-and-buggy medicine in an age of supersonic flight! To me it seems much more rational to apply intelligently the marvelous advances of modern pharmacology to the alleviation of human illness.

In reference to three particular points with which Dr. Heller is in disagreement, I would reply as follows:

1. "It is not important to re-assess the prophylactic administration of antibiotics in all situations except when they have definitely proved of value, and then only for highly specific purposes?"

Prophylactic use of penicillin and/or sulfadiazine in the prevention of the streptococcus infections which cause flare-ups of rheumatic fever or the development of subacute bacterial endocarditis on a congenital cardiac lesion is a common practice in cardiac clinics and is recommended by the Rheumatic Fever Committee of the American Heart Association. If it is considered so successful in this field, what is so illogical about adapting the same method to the prevention of, say nephrosis, asthma, and recurrent sinusitis or otitis, so commonly secondary to upper respiratory infections.

2. "Dr. Nevius also stresses the value of antibiotics in event of vomiting and diarrhea associated with 'cold.' *This I doubt.*"

The cause of "the virus" is frequently, in my opinion, not a virus but a bacterium, and frequently one sensitive to an antibiotic. I can only say that when a child is unable to retain medication by mouth, it is very rational to use an intramuscular antibiotic to knock out the offending organism. In my hands it has worked, when the methods of other physicians have failed.

3. "He also favors vaccine prophylaxis. Many published control studies have disproved their value."

As one who does considerable pediatric allergy, I have opportunity to see much infectious asthma, *i.e.* where the attacks of asthma are secondary to upper respiratory infections. The backbone of the treatment among competent allergists is desensitization with a mixed respiratory vaccine (H. Influenzae Serobacterin Vaccine Mixed, of Sharp & Dohme in my case) usually combined with house dust extract. The majority of children show gratifying improvement. From personal observation, *this is the rule, not the exception.*

There is an old saying that goes, "The proof of the pudding is in the eating." I commend it to Dr. Heller.

WILLIAM B. NEVIUS, M.D.
East Orange, N. J.

Making Big Cases Out of Little Ones

Dear Mr. Editor:

In medical circles these days every one is asking why in so many places, so many physicians seem to have forfeited public confidence. Fortunately this blight is not universal and the average family doctor plugging away quietly is still loved and respected as he ought to be.

But some physicians have earned reputations as case-padders. To their credit, their motives may be honorable: a desire to cull every case history and make sure that no obscure ailment is overlooked. But from the point of view of the sophisticated patient, this may look like an effort to inflate a minor case into a major one. Here is how one patient describes a visit to a "diagnostician." He didn't know of the doctor's specialty because he found the name in the yellow pages of the 'phone directory. And in this state it is unethical to indicate in the yellow pages that you limit your practice.

Anyway, this man came in to have a boil opened. He tells me that the doctor must have said to himself: "one visit and I'll never see him again. Not worth while."

The doctor knew it would be dishonest to tell the patient that the boil was the pilot signal of a dread disease requiring semi-weekly injections. That would be quackery. So through the doctor's mind, raced the following thoughts:

"Dishonesty never pays. Well hardly ever. You couldn't look your children in the face in the morning if you told lies. But what you *can* do is screen the history carefully enough to dredge up every little complaint and work on these one by one.

"*Technic*: go through the body, system by system, placing questions so as to elicit medical complaints. With a flourish, note and number each complaint. Do not stop until you have about a dozen symptoms."

"Doctor, I'm fine except that I have this boil."

"Do you ever have headaches?"

"Never."

"That's strange. Don't you sometimes get a twinge of pain over the eye, or in the back of the head?"

"Hardly ever."

You now write "2. Occasional headaches" underneath "1. Boil on left index finger."

"Ever get diarrhea?"

"No."

"Have you never, just for one day, had a loose movement?"

"Well—yes—after the office picnic last summer, I did have the runs. Had the same thing 3 or 4 years ago. Lasted only one day though."

On the sheet you now write "3. Occasional diarrhea."

"Is your voice ever hoarse?"

"No."

"Well, right now, I notice you sort-of clear your throat just before you speak."

"Oh yes, occasionally I do that. Doesn't everybody?"

You look grim, seal your lips, write "4. Has to clear throat at times. (Postnasal drip?)"

"Sleep all right?"

"Like a top."

"Never any trouble falling asleep?"

"Hardly ever . . . Oh, I suppose, if I'm excited or tense, it takes a while. And sometimes, I guess, like everybody else, I review the events of the day before falling asleep."

On the chart goes "5. Insomnia from time to time."

"Get tired easily?"

"Not me. I can play cards to midnight without feeling fatigued."

"Ever fall asleep over television?"

"Yes, if it's a boring program and I've been drinking beer."

Write it down: "6. Gets sleepy at times."

By this technic it should be possible to elicit at least a dozen complaints. For example:

7. Feet itch in hot weather.
8. Burps when he drinks carbonated beverages.
9. Has 'heart-burn' after eating certain fried foods.
10. Sweats a lot when exercising.
11 Gets short of breath after walking up more than 3 flights.
12. Sneezes when exposed to drafts.

After you have thus listed the complaints, you can re-read them out loud, and then explain that it is fortunate that he came to you at this point before any of these twelve (or 16) symptoms had gone too far. This now opens the door to a cavalcade of therapy. Ointments for the feet, sedatives for the insomnia, anodynes for the headache, antacids for the 'heart-burn,' anti-histaminics for the sneezes. Since you can't make the patient a walking medicine cabinet, you treat only one item at a time. In view of that tired feeling he really ought to have a basal metabolism test too. And as your aide puts the mask over his face, she hears an indistinct mumble from under the mask.

It sounds something like: "But really, doctor, all I want is this boil lanced."

(Forget it. Doctor knows best).

Local M.D.
Who must remain anonymous

Editor's Note: Our correspondent, we suspect, kept his tongue in cheek. One good thing about medicine though: we are willing to recognize that there are occasional brethren who go off-side like the one here portrayed. All professions have their black sheep. At least we are not complacent about our occasional sinner.

Announcements • • •

Graduate Courses at Seton Hall

Announcement is made of the following courses developed by the Postgraduate Department of the Seton Hall College of Medicine and Dentistry.

Course	*Subject*	*First Class*	*Lecturer*	*Last Class*	*Fee*	*Place*	*Time*
1 CM	Pediatrics	Nov. 2	Varied	Feb. 29	$25	MMC	4:00 to 6:00 p.m.
2 CM	Vascular Surgery	Nov. 2	Glasser	Dec. 14	$50	Clara	4:00 to 5:30 p.m.
3 CM	Biochemistry	Nov. 9	Cantarow	Jan. 25	$50	Mnsd	4:00 to 5:30 p.m.
4 CM	Medical Therapy	Nov. 8	Varied	Jan. 3	$50	JCMC	4:00 to 5:30 p.m.
5 CM	Cardiology and Cardiography	Nov. 11	Schwartz	Jan. 13	$50	JCMC	4:00 to 6:00 p.m.
6 CM	Proctology	Nov. 9	Gorsch	Dec. 28	$50	JCMC	4:00 to 5:30 p.m.
7 CM	Abdominal Surgery	Nov. 4	Lampe	Feb. 10	$200	MMC	4:30 to 6:00 p.m.
8 CM	Gynecology	Feb. 18	Falk	May 5	$75	MMC	3:00 to 4:30 p.m.
9 CM	Roentgenology	Nov. 1	Taylor	Jan. 3	$75	MMC	4:00 to 5:30 p.m.
10 CM	G-I Surgery	Nov. 4	Garlock	Dec. 23	$50	JCMC	4:00 to 5:30 p.m.
11 CM	Surgical Pathology	Nov. 12	Albano	Apr. 28	$200	So.O.	9:00 to 11:00 a.m.
12 CM	Anesthesiology	Nov. 9	Varied	Jan. 18	$50	MMC	4:00 to 5:30 p.m.
13 CM	Radiology and Biophysics	Jan. 10	Jacobsen	Feb. 7	$40	MMC	4:00 to 5:30 p.m.

PLACES

Clara: Clara Maass Hospital, 12th Avenue at Newton Street, Newark.
JCMC: Jersey City Medical Center, Jersey City.
Mnsd: Mountainside Hospital, 300 Bay Avenue, Glen Ridge.
MMC: Martland Medical Center, 117 Fairmount Ave., Newark.
So.O: Seton Hall Campus, South Orange Avenue at Ward Place, South Orange, N. J.

INFORMATION

Send applications, together with check, to Director, Postgraduate Medical Department, University College, 31 Clinton Street, Newark 2, N. J. In your application, indicate your medical school, degree, present hospital affiliations, medical society membership and whether you have had any previous Seton Hall courses. Indicate desired course by code number listed above (2 CM, 3 CM and so on). Make checks payable to Seton Hall University. Except for the anatomy and pathology courses, a special tuition rate of $10 applies to interns or residents.

Sterility Course

An intensive course in the differential diagnosis and relief of sterility is announced for December 5, 6 and 7 in New York City. This is a full-time program. For details, write to NYU-Graduate School, 550 First Avenue, New York City 16, N. Y.

Course in Poisoning

A course in the differential diagnosis of poisoning and in the practical treatment of poisonings is scheduled for December 5, 6 and 7 in New York City. This is a full-time course and will include field work at the office of the Chief Medical Examiner. For details write to: NYU-Graduate Medical School, 550 First Avenue, New York 16, N. Y.

Authors' Clinic • • •

How to Set Footnotes — Part II.

Secondary citations. A cardinal sin in medical writing is to derive data through another author and allow the reader to believe that you had examined the original.

For example: you are writing an article on the treatment of warts. You have read a paper by Stefanson in a recent Archives of Dermatology. Stefanson mentions that back in 1912, a man by the name of Hugo reported successful removal of warts by suggestion. He cites Hugo's work by page and volume number. You have not read the original 1912 paper but you don't mind if your readers think you have. You then boldly copy the citation, and write "As early as 1912, Hugo [6] was able to . . ."

6. Hugo, Victor: Papillomectomy by Persuasion. North American Annals of Cutaneous Disorders, 6:15-18 (June) 1912.

This gives your paper a very scholarly air. However, it is dishonest (because you never read the 1912 article). It is unfair to Stefanson who did and should be credited. It is a source of error. The only proper way is to give the citation through Stefanson. If you are going to refer to Stefanson in the same paper, he has or will have, an exponential number. Suppose you had an earlier reference to him which you keyed as Stefanson.[3] Now if the Hugo citation is number six, it is set up as follows:

6. Hugo, Victor: Cited by Stefanson.[3]

If there is no other reference to Stefanson, it is written:

6. Hugo, Victor: Cited by Stefanson, Gustav, Therapy of Warts, Archives of Dermatology, 17:17 (December) 1949.

Unpublished Data. Having heard of Dr. Brown's work on the treatment of dengue you write for some information which he courteously supplies. If it contains previously unpublished material, you cite it this way:

". . . but according to Brown,[7] such methods are not . . ."

7. Brown, Anselm: Personal communication to the author.

If you have been given access to some manuscripts or case records, or to a typed but unpublished thesis, this may be cited as follows:

3. Henle, Carry. Unpublished data.

or better, if appropriate:

18. Chaffee, Maurice: Manuscript on "The Aedes Mosquito" submitted in partial fulfillment of requirements for M.S. degree, and filed in library of Rutgers University, New Brunswick, N. J., June 1955. Unpublished.

Foreign Citations. If possible, the data should be cited precisely as for American references. If you can read the foreign language fluently enough to quote the reference, you will recognize the word for "volume" and know how to cite it. Some foreign periodicals use "parts," "sections," "editions" or "supplements" instead of, or in addition to, volume number. Watch out for this, and do not cite *'Abteilung Drei* as "volume three." Titles in German, French, Italian or Spanish remain in that tongue, but titles in other languages are translated into English. The name of the periodical is given without abbreviation, followed parenthetically by the name of the country and city in which published. Some foreign journals, particularly German ones, have fantastically long names. But abbreviation opens the door too widely to misunderstanding. Examples:

Arbeiten aus dem Staatinstitut fur experimentelle Therapie und dem Georg Spyer Hause zu Frankfurt (Jena, Germany)

or

Anales de Cirugia (Rosario, Argentina)

or

Bulletin de l'Association francaise pour l'etude du cancer (Paris).

(In the last reference, France is hardly necessary).

In general, the author should avoid foreign references, since most American readers find it hard to verify such citations or to do the additional reading suggested by a foreign bibliography. Of course if the author himself did not read the foreign periodical, he must not cite it directly, but only through the author who did refer to it. See paragraph *Secondary citations* (above) for method of arranging this.

Deleted citations. Sometimes, on reading the galley proofs you decide that it was unwise to refer to a certain source. Perhaps you have

changed your mind since the mansucript was submitted, or something new has developed which makes the reference unjustified. If you have 26 footnotes, and you want to delete reference 3, this would require the complete renumbering of every footnote from 4 to 26, and of every line of text with an exponential number. To avoid the expense of resetting so much type, the practice is simply to delete the footnote and explain that, thus:

3. Footnote deleted in proof.

or

3. Footnote deleted by author.

Or, if you wish, you may simply jump from footnote 2 to footnote 4 without explanation. This, however, will confuse alert readers.

Inserted citations. Sometimes, after the paper has been set in type, you decide you want to insert an additional citation. Suppose you have 19 footnotes, and you want to insert a new one between 5 and 6. If you designate the new one as 6, you then have to renumber every footnote thereafter as well as every line of text bearing an exponential number. The simplest way of avoiding that is either:

(1) Give the new footnote an "a" or "half" number. In this example, the new reference would be 5a or 5½. Or

(2) Give the new footnote the next available number. In this case, it would be reference 20.

If references are all collected at the end, method number 2 is better. If references are set up as footnotes, method number 1 is better. When you return the corrected galley proofs, call this to the editor's attention.

Footnotes to the entire article. The traditional footnote to an entire article is a reference to the place and occasion on which it was read. Most publications, including this JOURNAL, use an asterisk after the title, thus:

LOBOTOMY EXPERIENCE IN A COUNTY HOSPITAL*

HARVEY BLUESTONE, M.D., Cedar Grove, N. J.

*Read before the Annual Meeting of the Essex County Alliance of Psychiatrists, at Essex Fells, N. J., May 27, 1955.

The American Medical Association does not use an asterisk or any other diacritic at this point. The footnote simply appears on the bottom of page 1 of the article.

With respect to identifying the author, practice varies. Some journals do not identify him as to title, position or qualification at all. Others have a contributors' column in which the authors of that issue are identified. Sometimes the qualification appears immediately after the author's name. Not uncommonly the qualification is in a footnote. If no asterisk or other diacritic is used after the title then the asterisk appears after the author's name, calling attention to a footnote which identifies the author as "Professor of Surgery at Seton Hall College of Medicine," or "Fellow in Psychiatry at Essex County Hospital" or something like that. If an asterisk is used after the title, then both the article and the author are identified in a single footnote following this model:

A SIMPLIFIED EMERGENCY KIT*

Martin H. Weinberg, M.D., Brooklyn, N.Y.

*Read October 20, 1954, before the Kings County (N.Y.) League of Emergency Practitioners. Dr. Weinberg is senior resident in emergency medicine at the Coney Island (N.Y.) Hospital.

Citations to abstracts. An abstract is a secondary source, if you have not read the original and are depending on the judgment of the abstract writer. The ethical principles spelled out above under "secondary citations" apply here. For example: in the November 1954 Journal of Patagonian Medicine, there appeared an article by Adolf Pfft, on the homeopathic treatment of frost-bite. An abstract of this appeared in the June 1955 British Journal of Nontropical Medicine. Now, you read English fluently but cannot read Patagonian at all. The honest way to cite this, then, is:

14. Pfft, Adolf: Homeopathic Treatment of Frost-Bite. Journal of Patagonian Medicine, 17:893. (November 1954). Abstracted in British Journal of Nontropical Medicine, 22:478 (June 1955).

If you set this as a primary reference (that is, if you fail to refer to the abstract), you imply that you read the article in the original Patagonian.

Personal Communications are cited that way. *Unpublished data* are listed to indicate the exact source. Examples:

5. Ucko, Felix A.: Personal communication to the author.

6. Hochstadt, Joseph A.: Unpublished data, from the Laboratory of Experimental Gynecology in the Upsala College, East Orange, N. J.

7. Carwardine, Elizabeth, M.D.: Manuscript on "The Malingering of Malingering," submitted in partial fulfillment of requirements for M.S. degree, filed in library of Barber College, Caldwell N. J.

Footnotes to tables. It is impossible to predict exactly where a table will be inserted in

the printed article. It is, therefore, difficult to carry the exponential number series through a table. For instance, you have a table which, you hope, will be positioned after your footnote 6. So you number the citations in the table with superior numerals 7 and 8. Now when it comes to making up the journal, the editor has to place the table on the next page. Now, exponential numbers 7and 8, come *after* numerals 9 and 10.

To avoid this confusion, the practice of the American Medical Association press is this. If the reference is one which appears in the body of the text, it carries its regular exponential numeral. Otherwise, the citation is written right into the table. Thus:

REPORTED CASES OF SELF-EMASCULATION

	Age	IQ.
Brown [6]	35	120
Jonesboro [3]	31	85
Og (Am. J. Orthopsych. 18:167, Feb. 1955)	78	90
Anderson [1]	28	55
Burt (J. Nerv. & Ment. Dis. 76:125, June 1954)	44	90

Brown, Jonesboro and Anderson were cited elsewhere in the text, hence they retained their original superior numerals. However, Og and Burt were not elsewhere cited. So, for these two sources, the reference — in exceedingly compressed abbreviation—is inserted right in the table.

This seems inconsistent. It also clutters up the table. Our own practice is to assign the new sources new superior numerals, starting after the last exponential number in text. For instance, in this case, if the last footnote was citation number 26, Og would be 27 and Burt 28. The left hand column of the table would then read simply:

Brown [6]
Jonesboro [3]
Og [27]
Anderson [1]
Burt [28]

This has the disadvantage of sending the reader to the last page of the article to see the references to Og and Burt, but this is a modest price to pay for the consistency and clean appearance of the table.

Where to place footnotes in manuscript. In a thesis submitted for a degree, it is customary to place footnotes on the bottom of the page. In a manuscript for printing, this is unnecessary. There is no relation between the printed page and the typed page. The bottom of a typed page would not also be the bottom of the printed page.

Citations should be collected on a separate sheet of paper, and typed in order (according to whatever arrangement is to be used) properly numbered. This must be double-spaced even though the printer will set it in smaller type. At the end of the last page of the article-proper, write or type a note to the editor "Citations begin on next sheet" so that he will not overlook them. This system may be followed even if the journal uses footnotes, since the references are set in smaller type anyway, and have to be pasted into the journal dummy when the periodical is being made up.

If you are certain that the journal uses footnotes, you may type the citations right on the page in the line immediately below the reference point. This is done as in the following example:

". . . flexion of the thigh on the pelvis, of the leg on the thigh, of the foot on the leg and of the toes on the metatarsus. Friedman [1] realized

1. Friedman, Edward D.: Significance of the Babinski. Journal of Nervous and Mental Diseases, 51:146-150 (February) 1920

that extension of the big toe might be normal, but pointed out that when it did occur in health, it was accompanied by extension of the other toes. In infants, Wolff [2] obtained constant extension of the toes so that this was not con-

2. Wolff, Lotta: Response to Plantar Stimulation. American Journal of Diseases of Children, 39:1176-1177 (June) 1930.

sidered by her a sign of disease of the upper motor neurone. At the moment of birth, however, the response is of the flexor type. In all . . .

This gives the manuscript a sort of professional look, and makes it easy for the editor to place the citation just where it belongs. However, it causes trouble in pasting up the journal dummy, because the galley often has to be cut into little strips to permit removal of the footnote to the bottom of the page, and it badly slows the pace of the manuscript reader.

Since it is wearying for the editor to go through a long list of citations correcting erroneous abbreviations, safest practice is to abbreviate nothing in the references — not even months or names of journals. The editor can effect the abbreviation easily enough by deleting the terminal letters. It is much harder for him to rewrite incorrect abbreviations. However, if the author has access to *Index Medicus*, he may safely use the abbreviations which are found there.

HENRY A. DAVIDSON, M.D.
Editor

County Society Reports • • •

Bergen

The first regular meeting of the *Bergen County Medical* Society for the calendar year 1955-1956 was held September 13, 1955 at Bergen Pines. New officers for the coming year are: John E. McWhorter, M.D., president; William T. Knight, M.D., first vice-president; Leo J. Fitzpatrick, M.D., second vice-president; John R. Williams, M.D., secretary, and Frederick L. Muller, M.D., treasurer.

Dr. McWhorter gave a short speech of welcome. He announced that the *Bergen Evening Record* is to be co-sponsor with the Bergen County Medical Society in a series of public forums, the first on allergy and the second on heart conditions. Depending on the reception, further forums will be presented.

The parking problem in New York City was discussed. Many members of the Bergen County Medical Society render care in New York hospitals, but little provision has been made to have parking facilities available for any other than New York County Medical Society members with their special identification tags. This was referred to a special committee. Location of a new headquarters was discussed prior to the scientific session.

Robert H. Kennedy, M.D., director of surgery, Beekman Downtown Hospital in New York City, and President of the American Association for the Surgery of Trauma spoke on the "Early Care of the Severely Injured." He particularly stressed the need for trained personnel in ambulances and accident rooms. Many unfortunate accidents, permanent disabilities and even death have resulted from improper care by untrained attendants and doctors. The meeting adjourned after a brisk question session, and was followed by collation.

JOHN R. WILLIAMS, M.D.
Secretary

Cumberland

Members of the *Cumberland County Medical Society* were guests of Seabrook Farms at the Society's meeting on October 11. The meeting was called to order by the president-elect Dr. Sherman Garrison, Jr. Nineteen members were present at roll call.

Authorization was given to order four thousand Dreypaks® for use by the diabetes committee. Future programs of the Woman's Auxiliary, as approved by the executive committee, were reviewed. Dr. George Huston, having qualified for associate membership, was introduced to the Society. Dr. Albert B. Kump reported on pending legislation.

The following were unanimously elected to active membership by transfer from their respective societies: Dr. Elmer N. Mattioli, Camden County, N. J.; Dr. John J. Yankevitch, Luzerne County, Pa.; and Dr. Calvin Hahn, Philadelphia County, Pa.

Following adjournment of the short business session there was an interesting conducted tour of the Seabrook Farms showing how frozen foods are processed after which a delightful dinner was served in the old Seabrook homestead.

PAUL K. AYARS, M.D.
Reporter

Essex

The first fall meeting of the *Essex County Medical Society* was held at the Suburban Hotel in East Orange on October 12. It was a joint dinner meeting with the members of the Woman's Auxiliary. Governor Robert B. Meyner was the speaker.

He commended physicians for their high professional standards and pled with them not to lower them. He discussed projects undertaken by the State Government which touched the medical profession. The Department of Institutions and Agencies is the largest and most active of the 14 governmental departments. An appointed Board of Governors and a Commissioner direct its widespread activities.

Provisions for the education of retarded children and for increasing facilities for mental health training are among the particularly pressing problems. In both these fields there should be close cooperation between the State and local government, such as establishment of clinics and research units and centers for training professional and lay workers.

Another aspect of the general health problem which is increasing is the care of patients in the older age groups. A number of them are placed in institutions at the present time, who would benefit more if they lived in small units where conditions would be more homelike. Such an arrangement might well be the object of projects by individual communities.

In the question and answer period which followed, Governor Meyner touched on such varied topics as safety of roads; air, water and sewerage systems and pollutions; building of roads for Essex County. He reminded the audience that the size and variety of projects undertaken are circumscribed by the amount of money available to the State Government.

CAMILLE MERMOD, M.D.
Reporter

Gloucester

The regular monthly meeting of the *Gloucester County Medical Society* was held Thursday evening, September 15.

After the call to order by President William T. Beall, M.D., a program was presented on the medical and psychiatric aspect of alcoholism. Introductory remarks were made by William J. Harris of the Bureau of Alcoholism Control and Division of Chronic Illness Control of the New Jersey Department of Health.

The principal speaker was George A. Rogers, M.D., Attending Psychiatrist—Alcoholism Control Clinic, West Jersey Hospital.

Dr. Henry Sinexon was elected to emeritus membership in the Society.

Margrethe Johnson Kingsley, M.D., was elected to membership in the Society.

Paul H. Jernstrom, M.D., was authorized to transfer to the Philadelphia County Medical Society.

A resolution was passed to purchase an additional supply of Dreypaks for distribution to PTA organizations during Diabetes Detection Week.

ROGER D. LOVELACE, M.D.
Reporter

Passaic

The regular monthly meeting of the *Passaic County Medical Society* was held in the form of an Installation Dinner, introducing Dr. Joseph R. Jehl, the new president, to the Society. Dr. Jehl acknowledged and later spoke briefly on his three-point platform during his term of office. The meeting was held September 15.

One of the guests, Father William King, Chaplain of St. Mary's Hospital, gave the invocation.

Dr. Jehl presented Dr. Thron with a gavel in appreciation of his service during the past year. The following other officers were also installed: Drs. Abraham Shulman, first vice-president; Samuel C. Yachnin, second vice-president; Joseph F. Moriarty, secretary; Theodore K. Graham, treasurer; Frank B. Vanderbeek, assistant treasurer; David B. Levine, reporter; John A. Ianacone, editor.

Emeritus Members who attended as guests of the Society were: Drs. Louis Lipton, Hiram Williams and Leo V. Becker. The following guests of the Society addressed the gathering: The Honorable Lester F. Titus, Mayor of Paterson, Dr. Vincent P. Butler, President of The Medical Society of New Jersey, Mr. Richard I. Nevin, Executive Officer of The Medical Society of New Jersey, Mr. Henry A. Williams, Publisher of the *Morning Call.*

Elected to active membership were Drs. Stanley J. Gusciora, Charles A. Priviteri, of Passaic; Robert H. Joelson, John Sarokhan, Boris Schwartz of Paterson; Thomas G. Petrick of West Paterson; Robert J. Waldron of Montclair. Elected to courtesy membership was Dr. Jonathan C. Gibbs, Jr. of Passaic. Associate members elected were: Drs. Jerome Bellet, H. Louis Chodosh, Anthony F. Pernetti, Michael J. Pirozzi, Harry B. Gurland and Richard H. Small of Passaic; David I. Canavan of Franklin Lakes; Paul Glicksman of Rutherford; Lewis L. Immerman and Francis E. Kelly of Brooklyn; Rita Grant Newman of Pompton Plains.

Dr. Ianacone introduced the speaker, Hugh Luckey, M.D., Dean of Cornell University Medical College, New York. Dr. Luckey's address was "Medical Education in Latin America." A question period followed.

DAVID B. LEVINE, M.D.
Reporter

Salem

The regular monthly meeting of the *Salem County Medical Society* was called to order by the president, Dr. Eugene Pashuk, at the duPont Country Club, Penns Grove on September 16.

Dr. Harold Mark read a report from the Constitution Revision Committee.

Medical-Surgical Plan Committee reports that fewer than 80 per cent of the members want to join the N.J.B.C.

A letter was received from the Salem Children's Welfare and Visiting Nurse Association, requesting approval of an immunization clinic.

Applications to join the society from Drs. Albert Sungenis and Phillip Boyer were read and approved. Both were unanimously elected to the society.

Dr. William Sprout announced a plan to gather supplies for relief in catastrophe.

Dr. Charles Norton led a discussion of the poliomyelitis vaccine program. The State will provide vaccine for children, ages 5 to 9, if it is given free. Dr. Norton feels that vaccine obtained through commercial channels should be given for less than $5. Dr. Suter suggested that we establish an inoculation clinic for the state-furnished vaccine. Some felt that the free vaccine privilege might be abused by those able to pay. A committee was appointed to set up procedures. This included Drs. Charles B. Norton, Harry F. Suter, and John S. Madara.

Dr. Suter gave a report from the Public Relations Committee. He has organized a series of lectures to First Aid groups in Salem County. The Society approved sponsorship of the lecture series.

CHARLES E. GILPATRICK, M.D.
Reporter

Obituaries • • •

DR. JOSEPH E. RAYCROFT

Gentleman and scholar—the phrase is often used lightly and used inappropriately. But if anyone was a gentleman and a scholar, it was Dr. Joseph E. Raycroft. On September 30, 1955, at the grand age of 87, he died at his home in Princeton. If you take a look at the roster of honorary members of The Medical Society of New Jersey, you will find Joseph Raycroft listed as number 1.

Dr. Raycroft was a native of Vermont, where he was born in 1868, during the presidency of Andrew Johnson. In 1892 he entered the then infant University of Chicago and became an alumnus of its very first graduating class. He entered Rush and got his M.D. from that college in 1899. Dr. Raycroft had a life-long interest in hygiene and physical fitness, and apparently he practiced what he preached, since he retained his own physical vigor until his late eighties. He taught hygiene at Chicago, and soon became medical director of the entire university. There his pioneer work attracted so much attention that Princeton sent for him. From 1911 to 1939 he headed Princeton's department of health and physical education. He threw himself into New Jersey civic affairs with his usual vigor. He was active in the mental hygiene movement here, president of the Board of Managers of the Trenton State Hospital, and medical consultant to the Department of Institutions and Agencies. His magnificent library of books on physical education, he donated to Princeton in 1948, and from this nucleus has grown the Joseph E. Raycroft Library—one of the country's great collections in hygiene and physical education.

In 1930 he attained the extremely rare distinction of being elected an Honorary Member of The Medical Society of New Jersey.

DR. LEONARD H. SMITH

Dr. Leonard H. Smith died in East Orange on October 8, 1955 at the age of 78. An emeritus member of The Medical Society of New Jersey, Dr. Smith was a life-long resident of East Orange. He was graduated from Bellevue in 1903, and after an internship in Brooklyn, he returned to his native city in 1905 and opened an office for private practice. Until his retirement in 1954, Dr. Smith practiced continuously in East Orange. He was a founder of the Clinical Society of the Oranges, and, for years, was Chief of Surgery at Orange Memorial Hospital. He was an F.A.C.S., a member of the Society of Surgeons of New Jersey, and at one time, Dr. Smith was a Governor of the Essex County Country Club.

Book Reviews • • •

Many of the reviews in this section are prepared in cooperation with the Academy of Medicine of New Jersey.

The Stork Didn't Bring You: Sex Education for Teenagers. By Lois Pemberton. New York 1955. Lion Library. Paper. Pp. 192. ($0.35)

You might think that the teenager can tell *you* a thing or two about sex. Not really, though. For all their air of sophistication, their apparent confidence, there is a lot they don't know and are ashamed to admit that they don't know. Here is a book which, until recently was available only in the hard cover edition, but is now obtainable for only 35 cents. I have been recommending it to teenagers and their parents for years. The response to it has been uniformly good. Parents often ask family doctors to suggest a sex education manual. This one may be recommended without hesitation.

It's written with briskness and amiability and without coyness or undue moralizing. It's cheerful in style, down-to-earth, yet somehow conveys a sense of dignity and preciousness of the human body. It tells almost everything about sex except the technic of coitus. It discusses dating and pregnancy, menstruation and masturbation, petting and venereal disease. An appendix lists a roster of youth organizations and teen age magazines. Mrs. Pemberton does not preach a gospel of perfection. She is realistic but reverent. The tone of sophisticated pleasantness is never lost, but there is no hardness or cynicism here. No longer need a teen ager look furtively over forbidden adult literature. Here is a book he, or she, may read openly with interest and edification.

ARTHUR D. ZAMPELLA, M.D.

The Mental Hospital. Alfred H. Stanton, M.D. and Morris Schwartz, Ph.D. Basic Books, New York. 1955. Pp. 493. ($7.50)

For three years these two authors (a psychiatrist and a sociologist) tore apart the organization of a well known private mental hospital to see

what made it tick. They studied the staff hierarchy, the interactions of doctors, nurses, attendants and patients, each with each other, ward organization, intra-hospital communication and the problem of morale. Only about 10 per cent of our country's hospitalized psychotics are in institutions of the type here studied. The other 90 per cent are in public mental hospitals. The conclusions of the Stanton-Schwartz survey are, presumably, not applicable to public hospitals because of their enormously greater size, more complex organization, lower *per diem* costs, much poorer staff-patient ratios and lower ratio of voluntary patients. However, the *methods* of this survey are applicable and one can hope that some latter day anthropologist will apply this technic to the public mental hospital where most of our psychotic patients eventually go.

HERBERT BOEHM, M.D.

Office Procedures. By Paul Williams, M.D., Philadelphia 1955. W. B. Saunders Company. Pp. 412. ($12.50)

Doctors are so often concerned about king-sized problems that they pay little attention to the office care of the ambulatory patient. Dr. Williamson has here written a down-to-earth manual of office procedures within the range of competence of any family doctor. He tells you how to remove a foreign body from the ear, how to examine a well child, how to inject an anal fistulous tract, what to do about a stitch abscess, how to examine a stool for bacillary dysentery, what you can and should do (and what you can't and should not do) in a small office laboratory, how to take a chest x-ray, what instructions to give a pregnant woman, how to recognize an albuminuric retinitis, how to cauterize a vulvar wart and what to do about post-tonsillectomy bleeding. The material on office psychological testing is somewhat amateurish, but otherwise this is a magnificent volume, covering hundreds of office procedures under 15 chapter headings. If you ever want to give a gift to a new doctor or to one just going into practice, this is it.

And (just between the two of us) it won't hurt an established practitioner either.

HARVEY BLUESTONE, M.D.

The Human Adrenal Cortex. Volume VIII in th Ciba Foundation Colloquia. Edited by G. E. Wolstenholme, M.B. and Margaret Cameron, M.A. Boston 1955. Little Brown and Co. Pp. 665. ($10.00)

In April 1954, the Ciba Foundation sponsored a symposium on the human adrenal cortex. This fat book is a collection of the papers and discussions at that meeting. In all, the anthology covers about 3 dozen papers on all aspects of adrenal physiology. Most of the papers are solid with authority, weighty in both subject and style, and somewhat esoteric in approach. However, the scope is so broad that every reader will find something of interest—psychological aspects, biochemical problems, military applications, therapeutic implications, and so on. Not a book for bedside reading, not a "how to do it" book for office use, this volume is for the endocrinologist, the biochemist and the research physiologist, whose budget permits the purchase of $10 books.

VICTOR HUBERMAN, M.D.

Should the Patient Know the Truth? Edited by Samuel Standard, M.D. and Helmuth Nathan, M.D. Pp. 160. New York 1955. Springer Publishing Company. $2 (soft cover) and $3 (hard cover).

Two dozen persons in many walks of life contribute to this provocative anthology. Surgeons and obstetricians, priests and rabbis, nurses and ministers, lawyers and philosophers, all say something in these pages. The problem of whether, when and how to tell the truth is viewed from many angles. These essays touch on truth with respect to fatal disease, truth with respect to telling the patient about permanent disability; telling the truth to children; truth as a weapon, truth as a tool, truth as a bludgeon. Each essay is short—some run only to 2 or 3 pages—but each is meaty. This book will give you platforms for a dozen debates. Some of the authors have pat "yes" or "no" answers. Most of the contributors are content to stimulate your thinking. As I put down the book I thought of Emerson's phrase: "God offers every man a choice between truth and repose. Take what you please. You cannot have both."

HENRY A. DAVIDSON, M.D.

Everything and the Kitchen Sink. Philip Lesly. Farrar, Straus and Cudahy, New York, 1955. Pp. 160. ($4.00)

Inventors, politicians and generals are well recognized by history. But comparatively unsung are the heroes who take an invention, popularize it, distribute it, mass-produce it and make it possible for you and me to live with conveniences that no earlier emperor could have commanded. Mr. Lesly's text is an account of the changes that have affected daily life in this country in the century ending in 1955. It commemorates the centenary of the R. T. Crane Company whose founder was born in Paterson, N. J. The author is very restrained in his mention of the Crane Company. Here is a profusely illustrated story of the way in which the first industrial century made life better for all of us. There is no index.

MIRIAM N. ARMSTRONG

TUBERCULOSIS *Abstracts*

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XXVIII November, 1955 No. 11

TUBERCULOSIS—1955. IS HOSPITAL CARE NECESSARY?

By Ralph E. Dwork, M.D., M.P.H., The Ohio State Medical Journal, May, 1955.

The rapidly changing pattern of treatment of tuberculosis, especially since the announcement of isoniazid early in 1952, has made it increasingly important to "keep up" in this field. Questions have arisen regarding the need for hospital care, the duration of such care, and the intelligent handling of antimicrobial drug therapy. For these reasons it has seemed desirable for the Ohio Department of Health to present the best informed opinion available at this time.

(1) How have drugs influenced the duration of hospital care? Drug therapy has shortened both the average duration of hospital care and duration of bed rest for patients with early active disease. It has lengthened the period of hospital care for a significantly large group of patients, who would otherwise die early, but now are kept alive as chronic cases for a long time, with drug therapy.

(2) Is hospital care necessary for all active cases or will home treatment suffice for many such patients? If there are insufficient beds available, home treatment using anti-TB drugs is obviously the next best procedure. Rather dramatic early improvement is often seen in active TB treated at home with anti-TB drugs, but some such cases suffer "spread" of disease and may lose their chances for recovery.

Recently, James J. Waring, M.D., a former president of the National Tuberculosis Association, acknowledging the disadvantages of TB hospital care, such as expense, separation from family, and restrictions of hospital living, pointed out the serious deficiencies of home care in tuberculosis: Members of the family and the public are frequently exposed unnecessarily to tubercle bacilli. The patient at home seldom obtains an understanding of his disease and the attitude toward its long-term treatment which will lead him to protect his health long after active treatment has been stopped. This "education" which comes from the staff and other patients in the TB hospital is usually not accomplished when the patient is treated at home. Systematic rest at home is difficult to attain without supervision. In the hospital, rest is a prime consideration. The early weeks of drug therapy are often complicated by symptoms requiring changes in regimen, insistence on regular administration and moral support by the staff. At home the drugs prescribed may be omitted or taken irregularly with the result that early drug resistance develops. Toxicities of drugs in use and complications may go unrecognized for long periods when the patient is at home. In the hospital such incidents are handled safely and promptly. The increased importance of surgery in tuberculosis makes it essential that the strategic moment for intervention not be missed. Recent experience indicates that many patients treated at home are not being considered for surgery at any time. The technical facilities of laboratory and x-ray often provide crucial information determining the course of therapy. Such aids are often inadequately provided in home treatment but the hospital patient usually has access to the necessary services. Altogether, it is seen that while home treatment of tuberculosis may, at times, be successful, there are many hazards associated with it.

After viewing the problem of rest and exercise,

the Committee on Therapy of the American Trudeau Society recently said, "The Committee on Therapy points out again that, from the facts now available, there is no evidence to support a reduction in the amount of rest therapy from that of past practices except as it may be justified by an earlier attainment of an inactive status of the disease . . . The patient should be hospitalized, if at all possible, throughout the infectious stage of his disease. In addition to the benefits of hospitalization to the patient, this is sound public health practice to prevent the spread of tuberculosis . . . The total period of disability, though greatly shortened, on the average, with antimicrobial therapy, must still be estimated at a minimum of one year, even in mild cases which respond favorably to treatment."

When there were insufficient beds for the care of tuberculosis patients, there may have been some justification for individual cases remaining at home. Now that beds are available, a special obligation falls on the health departments and practicing physicians to see that "active cases" and potentially "infectious cases" are in hospital beds.

Public health officers and practicing physicians are in a strong position in insisting that every case of active tuberculosis have a period of treatment in a tuberculosis hospital. This period will be variable in length but must continue until the patient is not a hazard to his associates and until all therapeutic factors have been utilized to the patient's maximum benefit. The Ohio Department of Health recommends that all health departments and practicing physicians take a firm stand to the end that the process of tuberculosis control be accelerated to its maximum.

PREVALENCE OF TUBERCULOSIS IN LARGE CITIES

Editorial, The Journal of the American Medical Association, February 5, 1955.

Although there is considerable optimism regarding tuberculosis as a result of the introduction of new chemotherapeutic agents and the rapidly falling death rate, physicians close to the tuberculosis problem believe this may not be entirely warranted. There is good reason to believe that the prevalence (total number of cases of tuberculosis in the community) may actually be increasing.

One reason for the increasing prevalence of tuberculosis lies in the survival rate of numerous patients currently treated, as compared with the prechemotherapeutic era. Prior to 1946, most large tuberculosis institutions reported an annual death rate of about 30 per cent of the number of yearly admissions. The current rate in most of these institutions is under 10 per cent. As survivors return to community life from the sanatorium, some inevitably undergo a relapse, and infect other persons, possibly with tubercule bacilli already resistant to antituberculosis drugs.

A second factor that contributes to an increase in the number of tuberculosis patients living at home can be attributed to the outpatient programs. This type of program varies considerably from city to city. In New York, treatment is administered to patients who have left sanatoriums against medical advice, as well as to those who refuse to enter sanatoriums. Many of these patients have negative sputum. On the debit side, however, it is probable that many of these patients will relapse and many will refuse to undergo effective surgery. In the Chicago program, recalcitrant patients are untreated; only postsanatorium patients selected for early discharge are given outpatient treatment. The relapse rate for these selected cases has been reported as being very low.

A third factor that contributes to an increase in the number of tuberculosis patients at home is due to enthusiastic publicity on the efficacy of antituberculosis drugs. Many newly discovered tuberculosis patients are encouraged by this publicity to refuse sanatorium care and many sanatorium patients leave before treatment has been completed. Survivors who formerly would have died, patients with surgical collapse, a large number of "good chronics" who are clinically well but bacteriologically positive, and numerous recalcitrant, inadequately treated patients present a threat to effective tuberculosis control.

Effective management of increased prevalence of tuberculosis in a community requires improved supervision of patients residing at home, improved liaison between sanatoriums and outpatient clinics, and greater restriction of tuberculosis "public health menace" patients. While great strides have been made recently in tuberculosis therapy, what still remains to be accomplished should not be minimized in this most prevalent of all infectious diseases.

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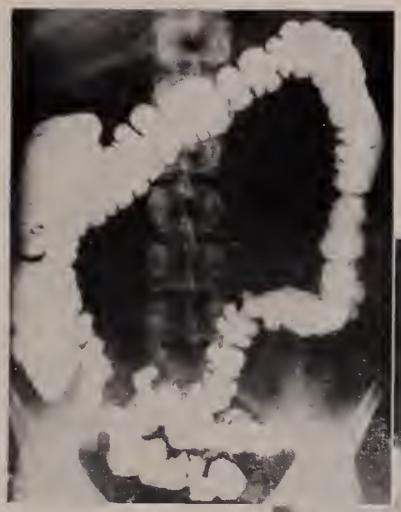
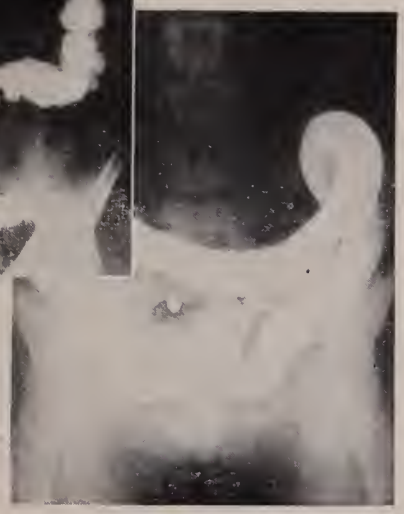


Normal Colon



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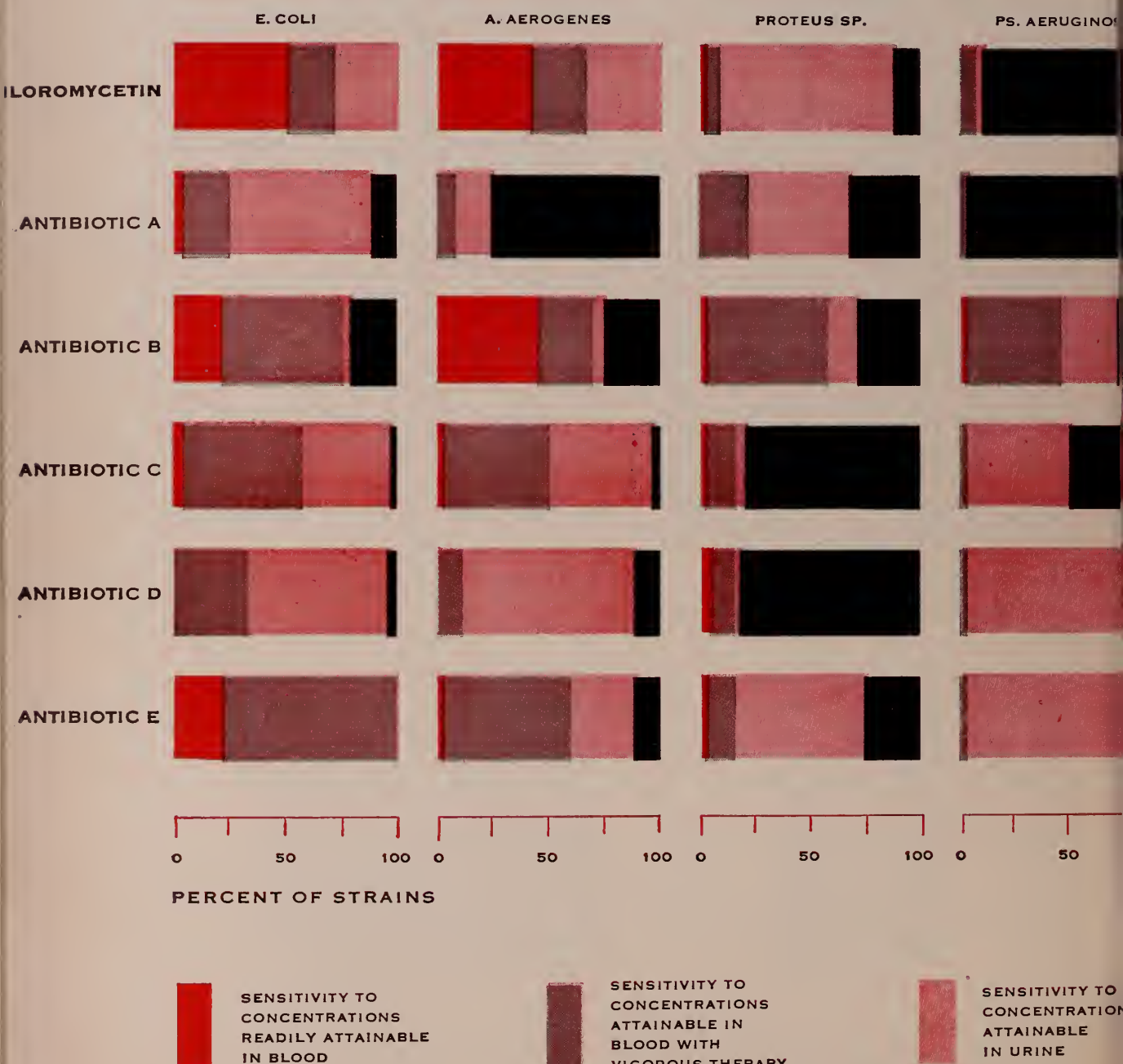

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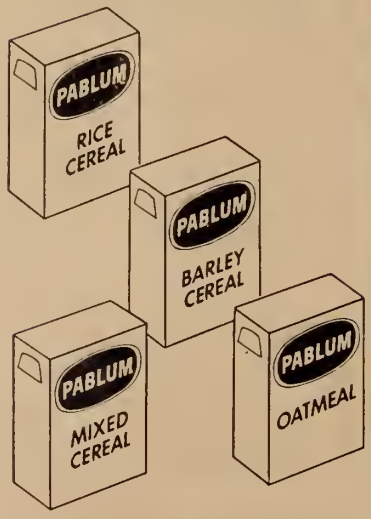

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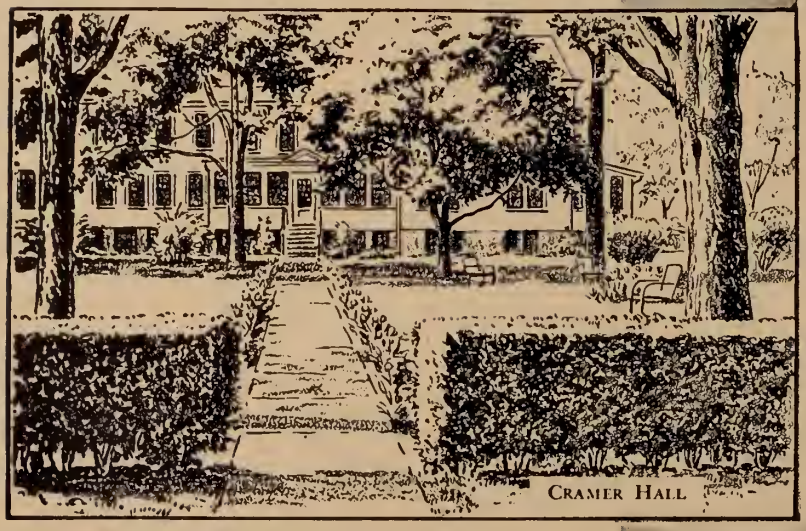

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Widows and Orphans of Medical Men ..... Anthony G. Merendino, Atlantic City

STATE SOCIETY PLAN

Accident and Health Insurance

The MEDICAL SOCIETY OF NEW JERSEY has officially selected the plan of our Company for Accident and Health Insurance and the policy is available to Society members in accordance with the Company's rules and regulations for acceptance of risks.

BRIEF OUTLINE OF COVERAGE

Accidental Bodily Injury Benefits —Full monthly benefit for total disability, from FIRST DAY, limit 60 months. One-half monthly benefit for partial disability, limit 6 months. Limit of time for total and partial combined 60 months.

Sickness Benefits —Full monthly benefit for total disability, commencing with EIGHTH DAY of disability, limit 24 months, house confinement not required.

Arbitration Clause —The Committee on Medical Defense and Insurance of The Medical Society of New Jersey are the SOLE arbiters in the event of any claim disagreement between Company and policyholder.

Cancellation Clause —Cancellation Clause, Standard Provision No. 16, not included in policy. The Company reserves the right to decline to renew on the following grounds only:

A. Non-payment of premium.
B. If the insured retires or ceases to be actively engaged in the medical profession.
C. If the insured ceases to be an active member of The Medical Society of New Jersey.
D. If renewal is refused on all policies issued to all members of the Society, in which event 60 days prior notice in writing must be given.

ANNUAL PREMIUM RATES*

(Applicable to ages at entry and attained at annual renewal of Insurance)

Monthly Benefits	Dismemberment Benefits	Ages up to 50 Next Birthday	Ages 51 to 60 Next Birthday	Ages 61 to 65** Next Birthday
$100.00	$ 5,000	$ 29.50	$ 34.00	$ 43.00
150.00	7,500	43.60	50.35	63.85
200.00	10,000	57.70	66.70	84.70
300.00	15,000	85.90	99.40	126.40
400.00	20,000	114.10	132.10	168.10
500.00	20,000	141.30	163.80	208.80
600.00	20,000	168.50	195.50	249.50

* Premiums may be paid half-yearly or quarterly, pro-rata.

* All rates above INCLUDE $1000 Accidental Death Benefit. Additional Accidental Death Benefit up to $4000 (making a total of $5000) may be procured for an additional annual premium of $1.30 per $1000.

Coverage for hospitalization and nursing fees is available at a small additional premium.

** Although the age limit for acceptance of risks is the 65th birthday, once issued there is no termination age limit for renewal and the rates of the last age group remain stationary.

This Company has been in business more than fifty-eight years and is one of the leading writers of Accident and Health Insurance, with a surplus to policy holders of more than seven million dollars.

If you are not insured under this plan or if you want further information, communicate with the undersigned managers.

Issued Exclusively by

NATIONAL CASUALTY COMPANY

Through

E. and W. BLANKSTEEN, Mgrs.

Authorized Disability Insurance Representatives of The Medical Society of New Jersey

75 MONTGOMERY STREET **DElaware 3-4340** **JERSEY CITY 2, N. J.**

SPECIAL ANNOUNCEMENT

To the Members of The Medical Society of New Jersey

We are happy to announce the approval of

THE EXTENDED PROFESSIONAL DISABILITY POLICY

under the Group Disability Plan with the NATIONAL CASUALTY COMPANY sponsored by your Society.

For a modest additional premium you can add this policy to your present one in this group and assure yourself of an income in case of an extended disability beyond the limits of coverage provided in the basic Physicians' Special Policy which you now carry with the National Casualty Company as a member of this Society.

Your basic policy provides monthly benefit for two years in the event of a sickness disability, and five years for an accident disability.

FEATURES OF THE NEW POLICY—

1. ACCIDENT BENEFITS—Continued for life.
2. SICKNESS BENEFITS—continued for five additional years, making a total of seven years.

ELIGIBILITY—

1. You must hold a basic policy in the group.
2. You must be under age 60.
3. Acceptable physical risks may purchase up to $400 a month but for no greater amount than that carried in the basic plan.
4. Impaired risks are eligible for not more $200 per month if 75% of the existing policyholders, under age 60, apply during sixty (60) day charter enrollment to be announced by mail to policyholders under age 60.

The enrollment period will not be extended. We heartily recommend this policy to you for your immediate consideration.

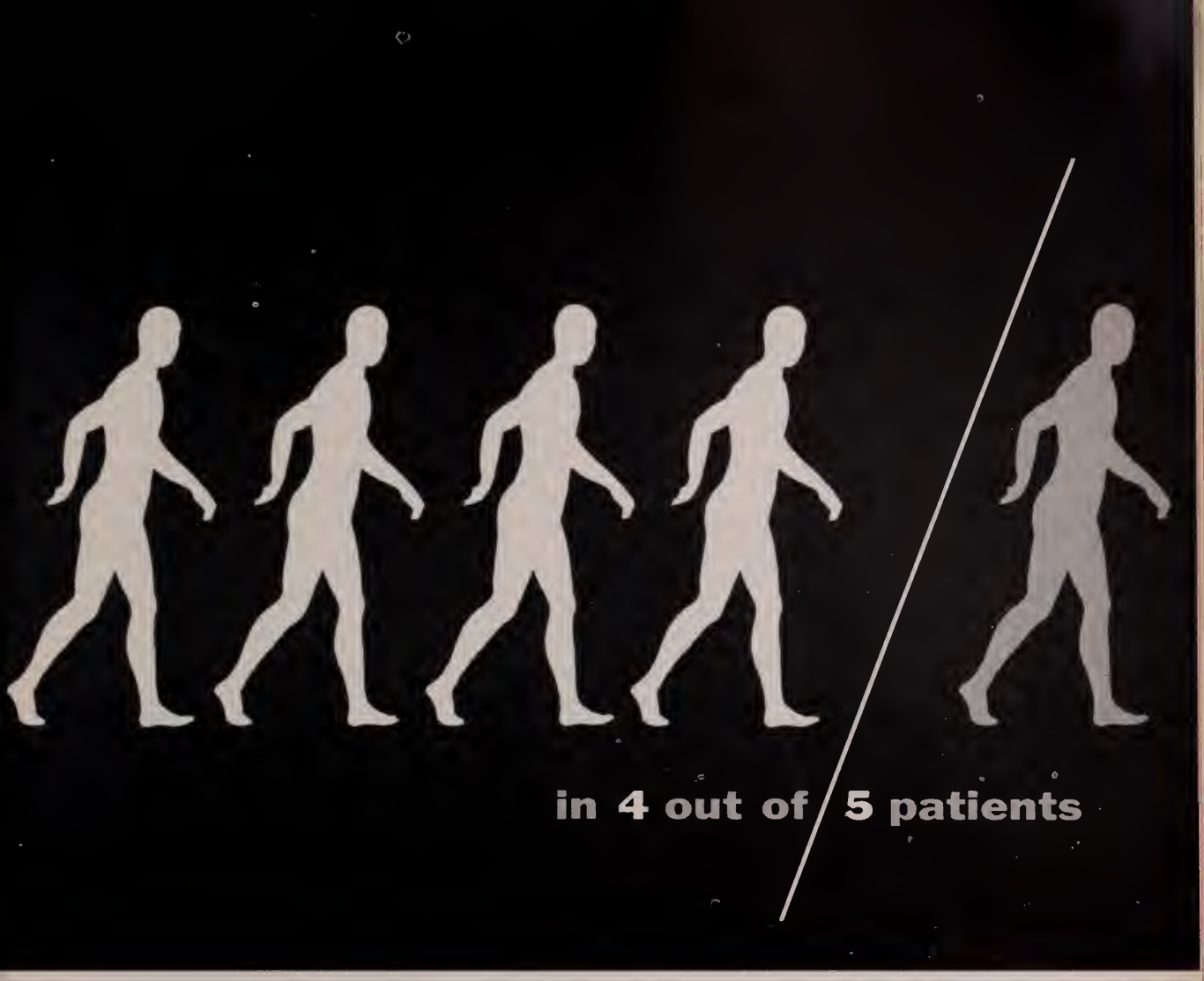
Those not presently insured under the basic policy described on the opposite page may apply to the agency for a basic policy as well as for the extended coverage and policies will be issued if they are acceptable risks, in accordance with the company's underwriting rules and regulations.

ANNUAL PREMIUM RATES*

(APPLICABLE TO AGES AT ENTRY AND ATTAINED AT ANNUAL RENEWAL OF INSURANCE)

Monthly Benefits	Ages up to 50 Next Birthday	Ages 51 to 60 Next Birthday	Ages 61 to 65** Next Birthday
$100.00	$ 11.00	$ 14.00	$ 18.00**
200.00	22.00	28.00	36.00**
300.00	33.00	42.00	54.00**
400.00	44.00	56.00	72.00**

*Premiums may be paid half-yearly or quarterly pro-rata, concurrently with basic policy.
**Renewal premiums only. This extended policy not renewable beyond 65th birthday.



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References:
1. Winsor, T., Humphreys, P.: Angiology *3*:1 (Feb.) 1952.
2. Plotz, M.: N. Y. State J. Med. *52*:2012 (Aug. 15) 1952.
3. Dailheu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.
4. Russek, H. I., *et al.*: Am. J. M. Sc. *229*:46 (Jan.) 1955.

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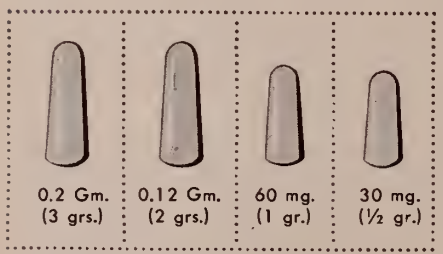

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Each of these diets may be easily modified to meet special needs. However, the important points for your patients are that the use of this chart eliminates calorie counting, permits the patient a wide range of food choices and dispels that old empty feeling by allowing between-meal snacks.

These advantages should make your management of difficult and average cases easier. If you would like a supply of the new Knox charts for your practice, just fill in the coupon below.

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Bibliography: (1) Bunim, J. J.; Pechet, M. M., and Bollet, A. J.: J.A.M.A. *157*:311, 1955. (2) Waine, H.: Bull. Rheumat. Dis. *5*:81, 1955. (3) Tolksdorf, S., and Perlman, P.: Fed. Proc. *14*:377, 1955. (4) Herzog, H. L., and others: Science *121*:176, 1955. (5) Bunim, J. J.; Black, R. L.; Bollet, A. J., and Pechet, M. M.: Ann. New York Acad. Sc. *61*:358, 1955. (6) Henderson, E.: New developments in steroid therapy of rheumatic diseases, presented at New Jersey State Medical Society Meeting, Atlantic City, New Jersey, April 17-20, 1955. (7) Boland, E. W.: California Med. *82*:65, 1955; abs., Curr. M. Digest *22*:53, 1955. (8) King, J. H., and Weimer, J. R.: A.M.A. Arch. Ophth. *54*:46, 1955. (9) Criep, L. H.: Prednisolone and prednisone in the treatment of allergic diseases, to be published. (10) Sternberg, T. H., and Newcomer, V. D.: Am. Pract. & Digest Treat. *6*:1102, 1955. (11) Gordon, D. M.: Prednisone and prednisolone in ocular disease, to be published.

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1. Pomeranze, J. et al.: Angiology, June, 1955.
2. Freedman, L.: Angiology 6:52, Feb. 1955.

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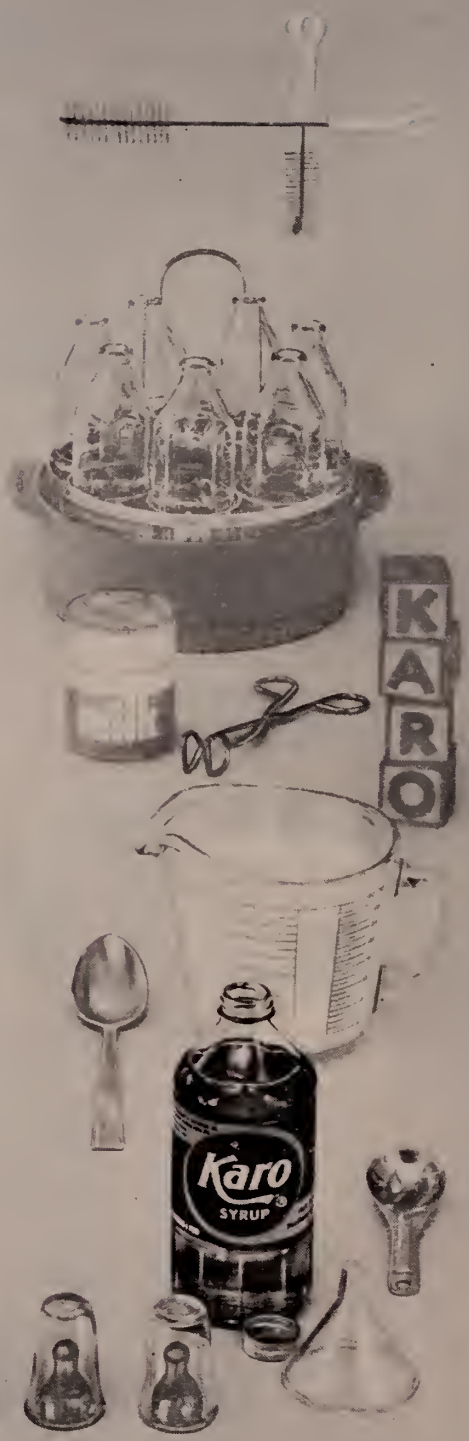

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BLOOMFIELD	Burgess Chemist, 56 Broad St.	BLoomfield 2-1006
BOUND BROOK	Lloyd's Drug Store, 305 East Main St.	EL 6-0150
GLOUCESTER	King's Pharmacy, Broadway and Market Sts.	GLouc't'r 6-0781 - 8970
HACKENSACK	A. R. Granito (Franck's Phar.), 95 Main St.	Diamond 2-0484
HAWTHORNE	Hawthorne Pharmacy, 207 Diamond Bridge Ave.	HAwthorne 7-1546
JERSEY CITY	Owens' Pharmacy, 341 Communipaw Ave.	DElaware 3-6991
MORRISTOWN	Carrell's Pharmacy (N. E. Corrao, Pharm.) 31 South St.	JEfferson 8-0225
MOUNT HOLLY	Goldy's Pharmacy, Main & Washington Sts.	AMherst 7-2250
NEWARK	V. Del Plato, 99 New St.	MArket 2-9094
NEWARK	Marquier's Pharmacy, Sanford & So. Orange Aves.	ESsex 3-7721
NEW BRUNSWICK	Hoagland's Drug Store, 365 George St.	KIlmer 5-0048
NEW BRUNSWICK	Zajac's Pharmacy, 225 George St.	KIlmer 5-0582
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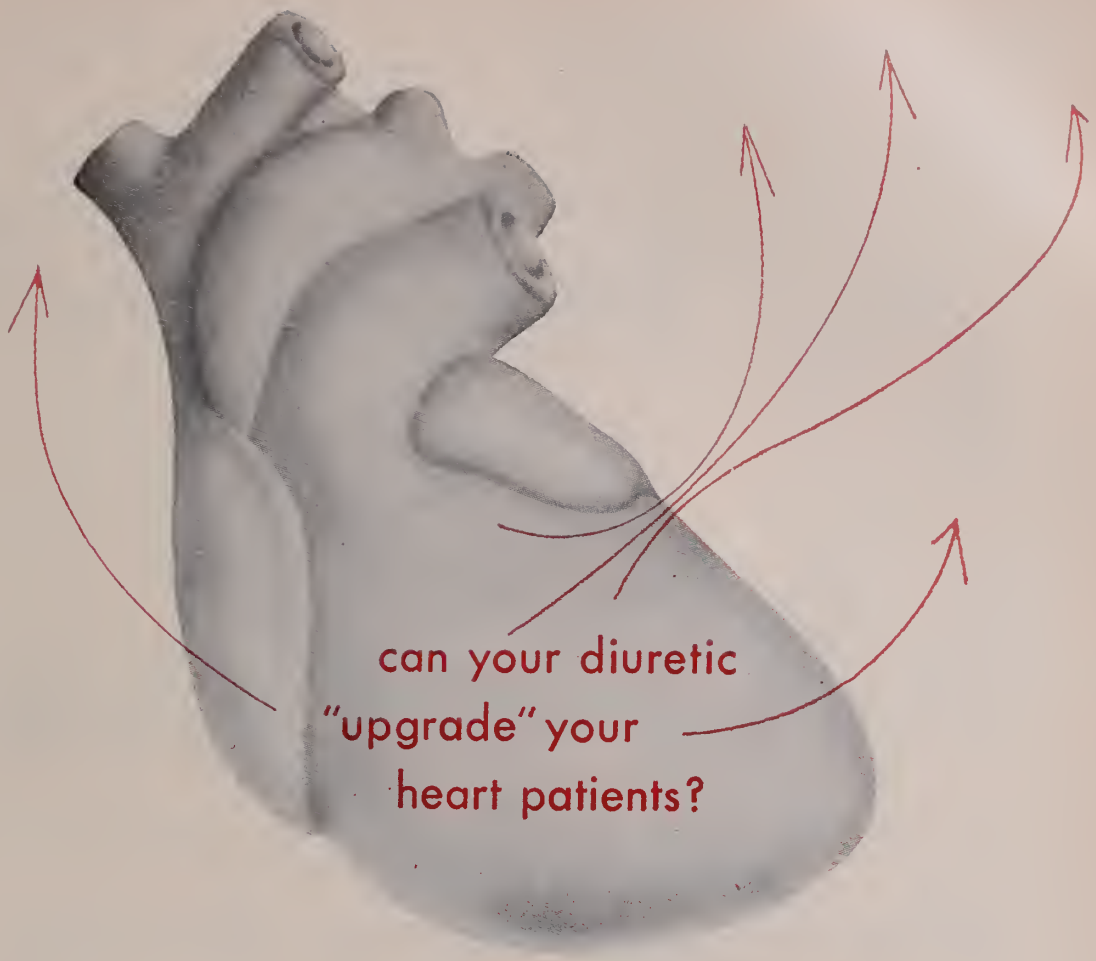

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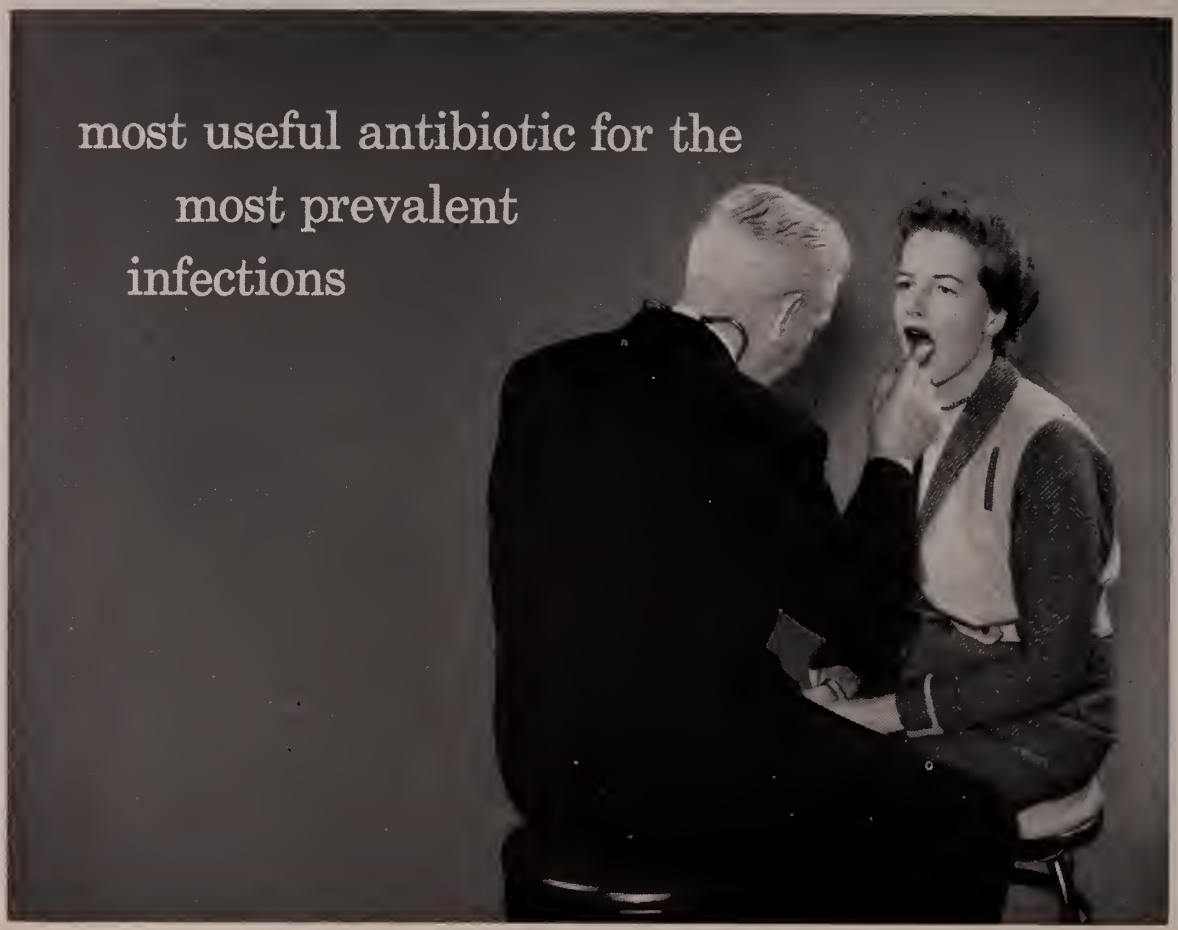

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THE JOURNAL
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Editorials • • •

Automation Marches On

In previous issues, your ever-vigilant editor has kept you up-to-date with the progress of automation in medicine. Faithful readers of these pages have already been rewarded with an account of such mid-century wonders as the automatic blood counter, the self-registering sphygmomanometer, the mechanical insulin injector and the self-calculating metabolism tester.

Comes now our fellow-member, Dr. Edward Dengrove with an automatic crib vibrator. And Milton Senn—who ought to know — says that "the vibrator is soothing and comforting and facilitates going to sleep in certain infants." This not only facilitates baby's sleep — it also facilitates mother's (or, in matriarchies, father's) sleep. Two other Monmouth Countians—Messrs. Lee and Morris — have developed a servo-mechanism for the automatic maintenance of anesthesia at the proper depth. The carbon dioxide content of the expired air regulates the depth of the anesthesia. The Minneapolis Honeywell people have an electronic control for delivering heat in arthritics which varies itself to suit different needs. IBM has a machine (they call it 702) which will suggest logical names for new pharmaceutical products, and which you can rent for the nominal sum of $3,560 a day. Dr. Henry Newman of Stanford University plans a coin-operated drunkometer by which you can give yourself an intoxication test. No automatic estoppel gadget has been attached to it yet.

Across the river, Dr. Charles Sarnoff in Jamaica (N. Y. not B.W.I.) has an automatic calculator for converting milli-equivalents per liter to volumes per cent. The Marsh Stencil Machine Company will sell you a gadget that dishes out adhesive tape to a pre-set length. In LaCrosse, the Pyroil Company is selling automatically self-vulcanizing rubber. According to a recent JAMA, Dr. Walker Reynolds

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has invented an automatic urine collector while the Brewer-Titchener Corporation has a blood bank which automatically rings an alarm when the temperature gets too low or too high. And according to the Association for Computing Machinery, they now have an electric brain which acts as its own doctor and locates and repairs defective parts.

A few activities still remain sturdily non-automatic. While Ed Dengrove's vibrator may rock-a-bye the baby, there is still nothing like mother's arm for giving him a sense of security. While a glass syringe may usurp the male role in insemination, no machine has yet been found to play the role of the uterus. (Seems that there really *is* nothing like a dame.) The anesthesiologist may develop a machine for giving *his* treatment, but the robot psycho-analyst is still in the distant future.

In India, according to a recent AP dispatch, two government employees were crossing a street in New Delhi. They were suddenly confronted by a hungry tiger. They responded with animation but not with automation. Each girl was carrying a batch of civil service forms. They ignited the forms (using a match not a lighter) and waved the torches under the tiger's nose. The animal fled. Which ought to dispose once and for all of the notion that civil-service forms are useless.

A patient under an oxygen tent used to have to shout "oh nurse" by lifting the side of the tent. Either that or he would push the call button. This, however, might set up a spark and then the tent would go boom! The Sperti Faraday Company of Adrian, Michigan, has solved *that* problem by dreaming up a non-electrical plastic bulb which operates the signal system when the patient presses even a weak hand on it.

The nurse indeed, will not even have to wait for that, if hospitals adopt the monitor developed by the same company. This one is a sort of television screen in the nurses' station. It is connected through wires to cameras and it ceaselessly scans every room on the floor, peering in and flashing back to the station. A two-way speaker system adds stereophonic sound to the vista-vision picture. While some of the interns object to this private eye, automation marches on!

"Arise, Men! Machines Have Gone Too Far," says a headline in the September 27 (1955) Washington *Post*. What aroused the postmen's ire was a machine developed by Central Research Laboratories which had two arms. One arm poured water into a flask, then lit a match, and finally applied lipstick to the lips of a live female subject, while the other arm nestled on her shoulder.

The only reverse note comes from Macy's. We are told that for some time this store has been bothered by dishonest characters who loiter within until the store is closed, and who help themselves to various small items during the silent watches of the night. Like all modern institutions, Macy's tried the electronic eye, but the thieves were apparently too shifty for that gadget. So now they have brought in dogs who roam the store all night huffing and sniffing. Since the arrival of the non-automatic pooches, the store has been safe from night raiders.

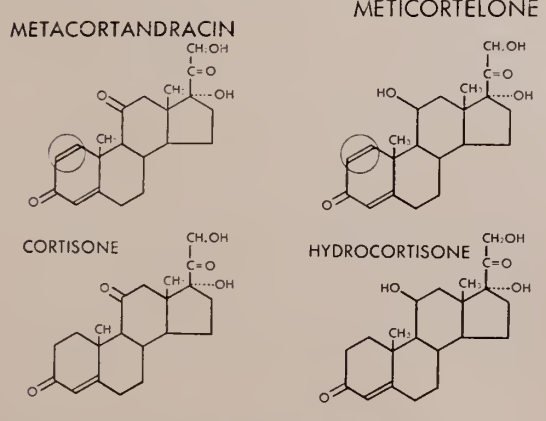
EDWARD HENDERSON, M.D.
Montclair

New Developments in Steroid Therapy of Rheumatic Diseases*

Newest of the adrenocortical steroids are prednisone and prednisolone. Dr. Henderson cites evidence showing them to be more potent than cortisone or hydrocortisone, and less likely to cause retention of sodium or excessive potassium loss.

THE first major change in the molecular structure of cortisone, resulting in a drug with high anti-inflammatory activity, was 9-alpha-fluorohydrocortisone. While this compound is highly effective, and in much smaller doses than is cortisone or hydrocortisone, side actions observed, particularly sodium retention, have militated against its use in the systemic treatment of rheumatic disease.[1,2,3]

The most important new discovery in this field[4] discloses two very interesting compounds, metacortandracin† (Meticorten®) and metacortandralone† (Meticortelone®), both of which are characterized by the addition of a double bond between carbon 1 and carbon 2 of the A ring of the cortisone or hydrocortisone structure. See the Figure.



These two compounds have been carefully studied clinically in several hundred cases of rheumatoid arthritis and other so-called collagen diseases. These studies reveal that metacortandracin and metacortandralone are three to five times more potent than cortisone or hydrocortisone on a milligram basis.

METABOLIC EFFECTS

ONE of the outstanding advantages of metacortandracin and metacortandralone over the older adrenocortical steroids is that they do not cause retention of sodium or excessive loss of potassium. Patients who have become edematous as a result of sodium retention following cortisone administration when switched to metacortandracin or metacortandralone will frequently lose considerable weight during the first week or two of therapy with the new drugs due to the fact that they are getting rid of the accumulated sodium and water.

Patients in metabolic ward on a limited pro-

*Presented at the Annual Meeting of The Medical Society of New Jersey, Atlantic City, on April 19, 1955.

†The generic term for Meticorten® during the early stages of research was "metacortandracin" and for Meticortelone®, "metacortandralone." In cooperation with and by the advice of the Council on Pharmacy and Chemistry of the American Medical Association these names have now been changed to "prednisone" (Meticorten) and "prednisolone" (Meticortelone).

tein intake will show a weight reduction due to nitrogen loss. If, on the other hand, these patients are given a liberal protein intake, this loss will not take place.

There is little or no potassium loss resulting from therapy with the new steroids and it has thus far not been found necessary to give supplemental potassium salts.

CLINICAL RESULTS

Rheumatoid Arthritis. Reference to Table 1 will show that of 721 rheumatoid arthritics treated with metacortandracin 699, or 97 per cent, showed good or excellent results whereas only 22, or 3 per cent, showed fair or poor results.

The new compounds have been singularly effective in relieving pain and swelling in many rheumatoid arthritics who have not responded to the older compounds or who have ceased to benefit from them.

In a carefully studied series of 57 patients treated with metacortandracin, Gray and Merrick[5] call attention to the fact that theirs is a preliminary clinical study and within the limits of the meaning of this term have concluded: "Meticorten® is more effective in the treatment of inflammatory arthritic and allied conditions than is cortisone or its older analogues. The response is more rapid, the effect is more prolonged between doses, and maintenance is better with small doses. Meticorten® is a more potent anti-inflammatory agent; there is, therefore, complete reversal of residual as well as active periarticular swellings. Side effects are comparatively infrequent and minor."

In an earlier study reporting on the use of metacortandralone, Bunim, Pechet, and Bollet[6] say that "Metacortandralone is an effective antirheumatic agent. Each of the indexes of objective joint changes, namely, swelling, tenderness, warmth, pain on motion, and range of motion, were significantly, rapidly and consistently improved following its administration. Subjective improvement, both articular and general, was striking and was greater than objective improvement. Metacortandralone is an anti-inflammatory agent. Histological examination of synovial biopsy specimens taken before and during its administration clearly demonstrated a marked subsidence of inflammation."

TABLE 1.

SUMMARY OF REPORTS ON METICORTEN®

	Result with Meticorten®						Result with Previous Therapy				
Indication	No. Pts.	Excellent	Good	Fair	Poor	Drug	No. Pts.	Excellent	Good	Fair	Poor
Adrenogenital Syndrome	13	13	—	—	—						
Anemia, Aplastic	1	—	1	—	—						
Anemia, Hemolytic	1	1	—	—	—	Cortisone	1	—	—	—	1
Arthritis, Gouty	5	1	2	1	1	Cortisone	1	—	—	—	1
Arthritis, Rheumatoid	721	348	351	17	5	Cortisone	49	1	5	5	38
						Hydrocortisone	122	—	13	12	97
Asthma, Bronchial	81	43	34	1	3	Cortisone	5	—	3	—	2
						Hydrocortisone	31	—	20	11	—
Bursitis	8	2	6	—	—						
Carcinoma, Prostatic	1	—	1	—	—						
Carditis, Rheumatic	1	—	—	1	—						
Dermatitis, Atopic	13	13	—	—	—	Cortisone	1	—	1	—	—
Dermatitis, Exfoliative	4	4	—	—	—	Hydrocortisone	1	—	—	—	1
Dermatitis, Herpetiformis	3	3	—	—	—	Hydrocortisone	2	—	—	—	2
Dermatomyositis	4	2	2	—	—	Cortisone	1	—	1	—	—
Drug Reactions	1	1	—	—	—						

Emphysema, Pulmonary	25	15	6	—	4						
Erythema Multiforme	1	—	1	—	—						
Erythroderma, Psoriatic	3	3	—	—	—						
Fibrositis	12	—	12	—	—						
Gout, Acute	2	2	—	—	—						
Leukemia, Lymphatic	1	—	1	—	—						
Leukemia, Myeloblastic	1	1	—	—	—						
Lupus Erythematosus	23	14	8	1	—	Cortisone	4	—	1	1	2
						Hydrocortisone	4	—	1	—	3
Nephrotic Syndrome	11	6	4	1	—	Cortisone	1	—	—	—	1
						Hydrocortisone	2	—	—	1	1
Osteitis Pubis	1	1	—	—	—						
Osteoarthritis	65	3	32	13	17	Cortisone	2	1	1	—	1
						Hydrocortisone	3	—	—	1	2
Pemphigus Erythematosus	1	1	—	—	—	Cortisone	1	—	1	—	—
Pemphigus Vulgaris	17	9	3	5	—	Cortisone	2	—	1	—	1
Polyarteritis	1	1	—	—	—	Cortisone	1	1	—	—	—
Periarteritis Nodosa	4	2	—	1	1						
Periarthritis	2	1	1	—	—	Hydrocortisone	1	—	—	7	1
Psoriasis	4*	—	—	—	3						
Purpura, Thrombocytopenic	1	1	—	—	—						
Radiculitis	1	1	—	—	—						
Reiter's Syndrome	1	—	—	—	1						
Rheumatic Fever	20	20	—	—	—						
Spondylitis, Marie-Strümpell	4	1	3	—	—	Cortisone	1	—	1	—	—
Spondylitis, Rheumatoid	4	1	1	2	1						
Torticollis, Intractable	2	1	1	—	—	Cortisone	1	—	—	—	1
Ulcerative Colitis	2	1	—	—	1						
Total	1066*	516	470	43	36	Cortisone	71	2	15	6	48
						Hydrocortisone	166	—	34	25	107
Per cent		48.4	44.1	4.1	3.4						

*One patient died during Meticorten therapy but *not* as a result of its administration.

DOSAGE

THE suggested suppressive dosage for severe rheumatoid arthritis is 30 milligrams (six 5 mg. tablets) per day. In less severe cases 20 milligrams (four tablets) per day will generally suffice. The suppressive dosage should be continued until a good response is noted. This will usually be two or three days. But this dosage may, if necessary, be continued for as long as seven days. If no response is noted within seven days, consideration should be given to the question of whether the disease is true rheumatoid arthritis. Dosages larger than 30 milligrams (six tablets) per day to induce the initial favorable response generally are not necessary. After a favorable response is noted, whether it be in two or seven days, the proper maintenance dosage should be determined by decreasing the suppressive dosage by 2.5 milligram amounts per day every two or three days. By this method, the minimum daily maintenance dosage can be determined. The maintenance dosage will usually range between 5 and 20 milligrams per day, although occasionally larger doses may be required. Should a flare-up occur during maintenance therapy, the dosage should be increased for a few days in order to bring the patient again under control. In

all cases, both for suppressive and maintenance therapy, the total daily dosage should be divided into four parts and administered after meals and before retiring.

In the treatment of patients with rheumatoid arthritis, the use of metacortandracin or metacortandralone does not preclude the necessity for accepted supportive measures such as rest, adequate diet, physiotherapy, and corrective orthopedic measures where indicated, or for attention to the general health of the patient.

ASTHMA AND PULMONARY EMPHYSEMA

IT HAS been particularly gratifying to note prompt and sometimes spectacular relief in patients suffering from intractable asthma or pulmonary emphysema who had failed to respond or had responded poorly to previous therapy.[7]

Vital capacity is increased and, in a day or two, most patients show striking clinical improvement. The dosage will vary considerably. It is frequently necessary to give large doses for the first day, and sometimes for two days. This will range from 30 to 60 milligrams per day, depending upon the severity of the case. When a favorable response is noted, the dosage may be decreased to a maintenance level, which will generally be from 5 to 20 milligrams per day.

OTHER DISEASES

IT WILL be noted from Table 1 that metacortandracin has been used with some success in the treatment of thirty-five diseases other than those described above. While these early reports are extremely encouraging, sufficient clinical experience has not yet accumulated to justify positive statements or to recommend any definite dosage form. These studies are being continued and definitive reports for each of the diseases listed will appear elsewhere.

SIDE ACTIONS

IN PREPARING figures for the incidence of side actions of every name and nature following the early clinical studies of any new drug one must be extremely careful to put down for the record everything that is reported (See Table 2). There seems to be, however, a tendency to report as "side actions" many commonly encountered symptoms or undesirable findings as due to the new drug when as a matter of fact longer experience shows that many of the observed "side actions" should have been ascribed to other factors. On the other hand, new drugs are sometimes used for many months, even years, before certain latent undesirable activities can be uncovered. It is wise, therefore, to be conservative and report everything that happens to a patient while being treated with a new drug.

TABLE 2.

SUMMARY OF SIDE ACTIONS TO METICORTEN®

Side Action	No. Reactions Among All Patients Treated	Severe			Mild		
		Over 50 mg./da.	25-30 mg./da.	5-20 mg./da.	Over 50 mg./da.	25-30 mg./da.	5-20 mg./da.
Blood pressure elevation	2					1	1
CNS Stimulation:							
Anxiety	1					1	
Apprehension	1					1	
Emotional upset	1						1
Irritability	1					1	
Restlessness	7				1	5	1
Cerebral irritation	1				1		
Convulsive seizures	1	1					
Depression	2						2

Dermatologic Manifestations:							
Acne	10				7	1	2
Purpura	1					1	
Rough skin	1					1	
Diuresis	6					1	5
Edema	5				1	2	2
Euphoria	29				10	11	8
Fat deposition increased	1					1	
Gastric distress	18				1	7	10
Glucose tolerance altered	1[a]				1		
Glycosuria	3						3
Hirsutism	5				1	1	3
Hyperglycemia	5	1			4		
Hypothermia	2				2		
Insomnia	21				3	13	5
Insulin requirement increased (Diabetics treated 8)	2					1	1
Moonface	17		1		4	3	9
Nocturia	5					2	3
Ulcer, duodenal	3[b]	1	1	1			
Ulcer, duodenal, perforated	2[c]	1		1			
Ulcer, peptic	1[d]	1					
Vasomotor phenomena:							
Acceleration	1					1	
Erythema of palms	1					1	
Extrasystoles increased	1						1
Flushes	5				1	3	1
Sweating	8		5		1	1	1
Trembling	2					1	1
Vertigo	5					3	2
Weight gain	1						1
Weight loss	13			1	2	7	3
Miscellaneous:							
Blurred vision	2					2	
Burning of mouth and/or throat	6					1	5
Clouded sensorium	6				5	1	
Cough	1						1
Dry mouth	1					1	
Headache	3					3	
Fullness of head	1					1	
Hoarseness	1						1
Leg cramps	1						1
Leg tenderness	2						2
Pain, abdominal	1						1
Pain, low back	2					1	1
Pins and needles sensation	6		4			2	
Sneezing	1						1
Tension	1					1	
Vomiting	1					1	
Weakness	2						2
Total No. Reactions	230	5	11	3	45	85	81
Per cent (1066 patients)	21.6	0.5	1.0	0.3	4.2	8.0	7.6

(a) 1 patient, a potential diabetic.

(b) Time of onset of ulcer unknown in 1 patient. Ulcer in 1 patient could have been anticipated with hydrocortisone. Third patient had been on hydrocortisone for a year prior to Meticorten®.

(c) Perforation occurred after administration of 10 mg. Meticorten® daily for 10 days in 1 patient. Perforated duodenal ulcer found at autopsy in 1 patient who had received ACTH and cortisone for four years prior to the administration of Meticorten®.

(d) Meticorte'one® administered to one patient who developed a peptic ulcer.

Summary of Number of Patients Reacting

	No.	Per cent
Patients with one or more reactions	122	11.4
Patients with no reactions	944	88.6
Total number of patients	1066	

A good deal has been said in the literature concerning cortisone and peptic ulcer. It seemed advisable, therefore, to review the literature for the incidence of peptic ulcer in the general adult population not treated with cortisone.

The incidence of peptic ulcer in general adult population samples has been reported as follows:

	Per cent
Sandweiss [8]	5.0
Ivy [9]	5 to 12
Knutsen [10]	5.1
Portis [11]	5.2
Draft figures	5.8
Jenniston [12]	7.0
Kirsner [13]	10.0
Eusterman [14]	12.2

Among patients with digestive symptoms, 16.5 per cent were found to have ulcers (Feldman [15]).

It will be seen that, according to documented evidence obtained from the study of 35,156 patients, the incidence of peptic ulcer in the adult population in this country is very high, and will probably average above 6 per cent.

According to Bunim,[16] the incidence of peptic ulcer in rheumatoid arthritics is twice as great as that found in the non-rheumatoid group.

We have surveyed the literature on patients treated with cortisone and in studies covering 1,440 patients a total of 76 peptic ulcers was noted, or an incidence of 5.3 per cent. While the incidence reported to date in patients being treated with metacortandracin is not nearly so high, there is no reason to believe that it will not be as great as that found in the general population not receiving steroid therapy.

One of the serious complications of peptic ulcer is perforation. The literature fails to disclose any unanimity on the incidence of perforation in peptic ulcer patients among the general adult population. Here are some figures reflecting the perforation rate in patients with peptic ulcer:

	per cent
Jamieson [17] (gastric)	1.1
Jenniston [12]	1.6
Portis [11]	2.0
Feldman [15]	2.7
Hurst [18]	3.0
DeBakey [19]	3 to 13
Flood [20]	3.4
Mulsow [21]	5.8
Emery [22]	7.7
Gott [23]	10.6
Edwards [24]	14.0
Fraenkel [25]	16.5
Mulsow [26]	17.7
Jamieson [17] (duodenal)	18.0

The most important study listed above is that of DeBakey.[19] Based upon his large series, it would appear that an incidence of perforation in any group of hospitalized peptic ulcer patients may very well be as high as 13 per cent.

In the 1,440 cortisone treated patients mentioned above, the total number of peptic ulcers reported was 76, or 5.3 per cent. Of these, 15 (or 20 per cent) perforated. In this limited study, the incidence of perforation is somewhat greater among patients being treated with adrenocortical steroids than in the non-steroid treated group.

In a very comprehensive review of the effects of ACTH and of cortisone in peptic ulcer, Sandweiss [27] stated: "Reports are available on patients with rheumatoid arthritis known to have had pre-existing peptic ulcer but who failed to develop reactivation of their ulcers despite the fact that ACTH or cortisone was administered for long periods. Reports also are available on patients treated with these hormones during active ulcer distress, in whom remission of ulcer symptoms occurred while receiving the hormones.

"In the opinion of the writer (Sandweiss) when there is a definite indication for steroid therapy and a great benefit is expected from its use, a pre-existing peptic ulcer is not an overriding contraindication for such therapy."

Until a good deal more is known about the relationship, if any, between metacortandracin or metacortandralone and peptic ulcer, they should be used with particular care in patients known to have an active ulcer. The possibility

of perforation must constantly be kept in mind. Obviously, the ulcer patient should at the same time receive some form of standard accepted ulcer therapy such as alkali and diet. Occasionally patients receiving metacortandracin will complain of gastric distress. This may be alleviated or obviated if the drug is given with milk or one of the insoluble alkalis, such as magnesium carbonate, calcium carbonate, or magnesium trisilicate.

SUMMARY

Two new drugs of the adrenocortical series, metacortandracin (Meticorten®) and metacortandralone (Meticortelone®) have been described.

1. Preliminary studies with these drugs indicate them to be 3 to 5 times as potent as cortisone or hydrocortisone on a milligram basis.
2. When administered orally, presently available data show the qualitative and quantitative metabolic and clinical activity of these two compounds to be identical.
3. There seems to be no tendency for these new steroids to cause retention of sodium or excessive loss of potassium.
4. Relief of pain, diminution in swelling, and increase in range of motion in rheumatoid arthritis is noted promptly following administration of metacortandracin or metacortandralone.
5. Prompt alleviation of the distressing symptoms of intractable asthma or pulmonary emphysema follows the administration of either of these new steroids.
6. In the normal therapeutic range of 10 to 30 mg. per day, side actions encountered to date have been few in number and generally mild in intensity.

Metacortandracin and metacortandralone are superior drugs in the clinical management of rheumatoid arthritis, intractable asthma, and pulmonary emphysema and are to be preferred over the older adrenocortical steroids.

236 Midland Avenue

A list of 27 citations appears in the author's reprints.

Prophylaxis of Streptococcal Infection

John E. Ebenshade (page 475 of May 1955 Pennsylvania Medical Journal) reports that for 2½ years he and his colleagues have been conducting a supervised program to prevent streptococcal infections in patients who had experienced attacks of rheumatic fever or who had congenital heart disease. The program consisted of daily oral administration of benzathine penicillin G with periodic clinical examinations and ECG. None of the 138 subjects have had recurrences, despite contact exposure to virus and other infections. There has been no evidence of penicillin sensitivity.

All but 3 of the subjects were children, most of them under nine. Of the total, 124 had rheumatic fever only; 7 had congenital heart disease only; 7 had both congenital heart disease and rheumatic fever. The initial attack of rheumatic fever occurred between the ages of four and nine years in 71 per cent. Recurrences of which there were records before the program started were as follows: 2 attacks, 23 per cent; 3 attacks, 16 per cent; 4 attacks, 3 per cent; 5 attacks, 2 per cent. One child had experienced 6 episodes of rheumatic activity up to the time this prophylactic study was started. Previous work indicated that penicillin is superior to the more versatile antibiotics or sulfonamides for prophylaxis of streptococcal infections. A highly insoluble salt, benzathine penicillin, was used in tablet form for oral administration in both hospitalized subjects and outpatients. The rationale rests on the assumption that the relatively slow hydrolysis prolongs absorption from the intestinal tract, giving a more uniform, if lower, blood level for a long period.

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Reserpine for the Cardiac Patient*

Reserpine was found useful in relieving the tachycardia and emotional symptoms associated with cardiac arrhythmias, thyrotoxicosis, neurocirculatory asthenia, and even coronary heart disease. This is, in a sense, an ingenious exploitation of the drug's side effects.

RESERPINE† is the most potent of the Rauwolfia alkaloids [1] in its hypotensive action. Its side effects, although essentially harmless and not very significant, can be used with benefit if properly applied in certain cardiac patients. Rauwolfia has been used for centuries in India [2] as a tranquilizing agent. For this purpose, it has been widely prescribed by Indian physicians particularly in psychiatric cases. Indeed, it was in such cases that its peculiar hypotensive and bradycardiac actions were first noticed. It calms people. It decreases the activity of individuals and lessens their aggressiveness and anxiety. It also has the ability to produce a definite bradycardia. These latter cardiovascular side effects usually persist for some time after the drug is stopped.

Taking advantage of these side actions of reserpine, we used it for the treatment of a group of cardiac patients whose major disturbing physical finding is tachycardia. The most disturbing is a syndrome consisting of:

1. Palpitation
2. "Nervousness" or "jitteriness"
3. Indefinite pains in the chest
4. Shortness of breath

This series included the following types of patients:

1. The post coronary occlusion tachycardia (convalescing myocardial infarction)
2. The signs and symptoms of neurocirculatory asthenia
3. The symptoms of thyroid toxicosis
4. The disturbing premature auricular or ventricular contractions
5. Finally its direct effect on the heart of the hypertensive

(1) In the post-infarction or convalescing coronary heart disease group, "nervousness" and asthenia exaggerate the symptoms of coronary heart disease. Mental depression is frequently precipitated particularly by the acute illness of myocardial infarction and the long but necessary convalescence, especially in the strenuous middle aged man who was never ill before.[3] It is precisely for this type of patient that reserpine is made to fit the symptoms. After 5 to 8 days of the Rauwolfia alkaloid, the tension disappears and with it the depression. The patient is more relaxed and the rapid heart returns to a normal rate. There is a slight gain in weight affected by the relaxed state, and the ability to pursue their former occupation furthers a lessening of their symptoms.

*Read at the Annual Meeting of The Academy of Medicine of New Jersey, May 27, 1955.

†Grateful acknowledgment is made to Ciba Pharmaceutical Products, Inc., for the supplies of Serpasil used in the study.

1. Vakil, R. J.: British Heart Journal, 11:350 (1949)

2. Wilkins, R. W.: Ann. Internal Med. 37:1144 (1952)

3. White, Paul: Heart Disease. Macmillan Company, New York, Ed. 3. Page 499 (1946)

The therapeutic effect is not because of direct action on the myocardium but by the very nature of its action on the sympathetic centers and the hypothalamus as a tranquilizing agent and a side effect of bradycardia.

(2) Neurocirculatory asthenia also called less adequately[4] "the soldier's heart" or effort syndrome or anxiety neurosis. This is an important instability and abnormal irritability of the nervous and circulatory system, of unknown cause. It is characterized by a group of symptoms consisting of

1. Dyspnea (often with sighing respiration)
2. Palpitation
3. Exhaustion
4. Precordial pain (most often an ache)

Dizziness, "nervousness" and sometimes tremor, sweating, headache and syncope aggravated by effort or excitement occur. These often accompany or follow anxiety reaction, infection, or physical or emotional strain, especially in hypersensitive individuals who in extreme cases may show the condition more or less constantly with little or no provocation. It is neither fatigue *per se,* nor infection, nor thyrotoxicosis, nor emotional strain or psychoneurosis; it is a state of ill health which may attend or follow any of these conditions or indeed others too, or even possibly stand alone.

The symptoms of circulatory distress are dyspnea, palpitation, and precordial or substernal oppression, alone or combined. Generally associated with them are weakness and often dizziness, faintness and tremor. The combination of these symptoms occasioned by exertion has been called the "effort syndrome."

A normal person under strenuous effort will show the syndrome in some form, perhaps having dyspnea alone, palpitation, substernal or precordial oppression or a combination of these symptoms.

It is likely that under such circumstances in normal persons the relative abilities of the myocardium to maintain the general circulation, and of the coronary circulation to maintain the myocardium determine whether dyspnea or pain will be the predominant symptoms. Even in normal subjects, a third factor besides myocardial and coronary reserve must be taken into account as modifying symptoms or exaggerating one or another, especially precordial pain, palpitation or faintness. This third factor is emotional ("nervous") sensitivity.

HYPERTENSIVE individuals in whom the effort syndrome is easily induced are likely to develop the same symptoms on excitement as on exertion; at such times the symptoms form an excitement syndrome and not an effort syndrome. When the effort syndrome is very easily induced and the symptoms are marked, it is an important condition because it is itself often a partly or completely incapacitating disorder. Under proper treatment the patient can obtain relief.

For these patients, reserpine proved the ideal drug. The sighing respiration, palpitation, precordial aching, the feeling of exhaustion and especially the state of anxiety were quickly brought under control by its quieting action and by its ability to slow the heart rate.

(3) For the patient who is suffering from the tachycardia and accompanying symptoms of thyroid toxicosis, reserpine had results which were pleasing but not entirely satisfactory. These patients did develop subjective calmness, perspired less, had less palpitation, gained some weight and were able to sleep better. But we could sense that they were still hyperthyroid and required antithyroid treatment. Reserpine may prove a good adjunct drug to the usual treatment whether it be radioactive iodine, thiouracil or in preparation for surgery. Reserpine did not affect the basal metabolic rate.

(4) In cases of disturbing premature contractions both auricular and ventricular, it is a drug worthy of trial. Either the extra contractions are lessened or the patient becomes less conscious of the symptoms caused by the premature contractions.

(5) Reserpine has an indirect effect on the hypertensive cardiac. When the pressure is lowered, there is noted a reversal of the electrocardiogram toward the normal in many patients who had previously shown a strain pattern.

4. Viko, L. E.: Modern Concepts of Cardiovascular Disease 2:7 (July 1933)

Dosage: None of these patients received more than 0.1 milligrams four times per day. Relief of the symptoms appeared in 7 to 10 days and the maximum effect was achieved in about 20 days. After the therapy had become effective, the maintenance dose can usually be lowered but that dose varies with the individual case. Blood pressure was not affected in normotensive patients.

The usual bothersome [5] side effects of nasal stuffiness, and dreams do occur even with these small doses but the former are easily controlled with antihistamine or ephedrine nasal sprays and in time these and the dreams disappear as the medication is continued.

This report is based on observations involving 30 ambulatory patients all treated at the office divided into the following types:

10 patients with the post-myocardial infarction syndrome
8 patients with neurocirculatory asthenia
4 patients with thyroid toxicosis
8 patients with disturbing premature contractions, auricular and ventricular

All patients were followed on the average of once a month. A complete physical examination including electrocardiogram and fluoroscopy was done at each office visit.

Space does not permit the detailing of all findings and the electrocardiograms of the patients. For demonstration purposes, a short resume of the electrocardiographic findings before and after therapy of a few typical patients in each category is presented below. (The letter "C" and the attached numerals are the code numbers used for the purpose of this study).

C-30, male, age 52. July 1953—Extensive posterior wall infarction. November 1953—Started working half-days. Tired all the time. Palpitation, nervous, tense. Sedation, more rest. Still has a tachycardia, fatigue. July 1954—E.C.G., rate 94. These complaints persisted. September 1954 started reserpine (0.1 mg. q.i.d.). 10 days-2 weeks later working all day, feeling fairly well. E.C.G., rate 75.

C—33, June 1954. W.A.W., male, age 57. Myocardial infarction posterior wall and post. infarction, tachycardia. December 1954—E.C.G., posterior wall infarction. Rate 115 which continued up to February 11, 1955—Posterior wall infarction, rate 110-115, tired, palpitation, slight effort. Started reserpine (0.1 mg. q.i.d.) February 17, 1955—feeling better, not short of breath, sleeping well, no palpitation. E.C.G.—75, occasional P.V.C.—old posterior wall infarction.

C-21, April 1953. T. A., male, age 56. Past 4-5 years—c.c. throbbing throughout body, tense, dyspneic, palpitation. B.M.R. plus 12—I-131 normal. E.C.G. rate 96—N.C.A. November 1954—Started reserpine (0.1 mg. q.i.d.). 2 weeks later—feeling well and has no complaints. E.C.G. rate 64. Past few months has played tennis.

C-25, June 9, 1954. R.W., female, age 65. Physical: Wet palms, tremor, tachycardia, B.P. 150/90. B.M.R. plus 9. I-131 uptake normal. Weight 121 lbs. Neurocirculatory asthenia. E.C.G. rate 94. L.A.D. Occasional premature ventricular contraction. July 1954—Started reserpine (0.1 mg. q.i.d.). 3 weeks later, calm, no pains, not short of breath. E.C.G. rate 65. Normal sinus rhythm. Weight 123 lbs.

C-27. Female, age 57. Since June 1946 blood pressure 200/140. November 1951—E.C.G. left ventricular hypertrophy and strain. April 19, 1952—hospitalized for cerebral accident. Blood pressure 220/140. November 13, 1952—readmitted for cerebral accident. Blood pressure 230/140. July 1953—started reserpine (0.25 mg. q.i.d.). Present status—blood pressure 140/100. December 1954—E.C.G. normal tracing—no strain pattern.

5. Winsor, Travis: Ann. N. Y. Ac. Sc. 59:67 (April 1954)

SUMMARY

RESERPINE was used in the treatment of cardiac patients who basically had a tachycardia associated with symptoms of emotional tension. These included: (1) Coronary heart disease. (2) Neurocirculatory asthenia. (3) Thyroid toxicosis and (4) Arrhythmias.

All these patients were improved symptomatically and the tachycardia was relieved.

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Ventnor

Medical Aspects of the Common Cold*

"It may be the last human infection to be overcome," once said Andrewes, "but science will abolish the common cold in the end." Dr. Gleason does not here have the magic formula. But he does present a compact review of the problem. Particularly poignant is the highlighting of the problem of the general practitioner who is on the horns of a dilemma. Read on and see . . .

Which among us has never had a common cold? May we have a showing of hands? This, then, gives us an idea of the appreciable, almost universal morbidity of this malady among physicians.

What is the morbidity in the general population? A popular weekly news magazine[1] opened an article with: "From the rockbound coughs of Maine to the sun-kissed sniffles of Florida . . . " In this paper, Clark[1] said that respiratory ailments as of February, 1955, were productive of two billion dollars loss of annual income; caused 50 per cent of all employee absenteeism; and that "In a single day, some twenty million men, women and children complained of sore throats, inflamed eyes and dripping noses." Further, Clark[1] added: "Two out of three people have three attacks a year, costing about $25 apiece." Increased sensitivity to colds has been observed in women, in children under ten, in farmers, in office personnel as opposed to factory workers, and in those who live in inland sections of the country where the seasonal temperature variations are greater. Such figures and statements are difficult to document but do indicate certain general trends as well as the importance of this disease.

SIGNS AND SYMPTOMS

Immunologic data may cast doubt on the existence of the "common cold" as an entity. All acute respiratory disease may some day be classified as to the type-specific virus. Can you conceive of a patient complaining of "a type three A-P-C† infection" rather than the time honored lament, "I've got a beaut of a head cold, Doc?"

However, until that day comes, the traditional and utterly nonspecific symptoms of the common cold will continue to be: roughness and soreness of the throat, naso-pharyngeal irritation and fullness, sneezing, nasal discharge (initially watery or serous and later mucopurulent), non-productive cough, headache, malaise, chilly sensations, loss of olfactory sense, impaired hearing, aching of the extremities, and inconstant low-grade fever.[2]

The signs equally traditional and nonspecific include: swelling and injection of the naso-pharyngeal mucosa; nasal blockage; post-

*Presented before the Section on Otolaryngology, The Medical Society of New Jersey, Atlantic City, April 18, 1955.

†The initials A.P.C. do *not* refer to the three common pharmaceuticals found in so many "cold" capsules. The letters stand for adenoids, pharynx and conjunctiva, the site of the viral operations.

nasal drip; injection of the conjunctivae, fauces and posterior pharynx; upper cervical lymphadenopathy; excoriations at the nasal orifices; and herpes of the upper lip.[2] Later signs, due to complicating infection, may involve any portion of the respiratory tract from the sinuses to the lungs.

Since all of these signs and symptoms are present to a variable degree in upper respiratory infections of almost any type, we may begin to infer at this point that "all that sniffles is not cold."

EPIDEMIOLOGY AND VIROLOGY

KRUSE (1914) and Foster (1916) indicted a filterable virus as the criminal in the common cold. Acknowledgment is given to Dochez *et al.*[9] (1930) for first reporting successful transmission of the common cold to chimpanzees by means of filtrates. However, an abundance of more specific data has emerged from investigation here and abroad during the past ten years. From the Common Cold Research Institute in Salisbury, England (headed by Dr. Andrewes) comes a report[3] which seems to lead to the following nine inferences:

1. Colds are spread by direct person-to-person manual contact and by inhalation of droplets of infected nasal discharge.

2. Exposure to wetting, chills and drafts apparently does *not* predispose to infection with the cold virus.

3. Reconfirmation of the fact, originally established by Dochez,[9] that the common cold cannot be transmitted to small laboratory animals, except the chimpanzee, "hard to get and hard to handle;" hence human volunteers are essential.[9]

4. A suspicion "that catching a cold in real life depends on receiving quite a small dose of virus at a time when one's defenses are momentarily off their guard" and that the intangible factors of individual resistance and susceptibility to respiratory disease are all too generally disregarded. These factors make evaluation of measures for treatment and prevention difficult. Experiments in human volunteers thus far have involved the administration of "overwhelming" amounts of virus.

5. Determination of a most frequent incubation period of two or three days, rarely as short as twenty-four hours.

6. The virus itself is slightly smaller than the influenza virus, with probable size of about fifty millimicra. It is invisible under the electron microscope. The virus will survive for at least two years in dry ice containers at minus 76 degrees Centigrade and for at least a few days at ordinary ice-box temperatures. It has been recovered in small amounts after drying fully on a pocket handkerchief.

7. Immunity is short-lived, lasting rarely more than three months and often for only one month.

8. A demonstration that the "cold" virus or viruses can be cultivated in human embryonic lung tissue.

9. A suspicion based on epidemiologic data in isolated communities that multiple "cold viruses" may exist. This suspicion has apparently been confirmed by the more recent work of Huebner and associates[4] of the Public Health Service.

This group[4] have been engaged in the study of the undifferentiated respiratory diseases, the febrile catarrhs (acute respiratory disease, exudative non-streptococcal pharyngitis, primary atypical pneumonia) and the common cold, all of which, on clinical grounds alone, may be confusing as to diagnosis. By special culture technics they have isolated 143 strains of respiratory viruses which have been segregated into six immunological types, numbered 1 to 6. These new viruses have been designated as the adenoidal-pharyngeal-conjunctival agents, based on the important anatomic sites in which they have been found. They are commonly referred to as A-P-C† viruses. The table shows the common properties of the entire virus group.

The human explant cultures (epitheliotropic) listed in line 1a of the table were primarily human tonsils and adenoids, surgically removed, bacteriologically sterilized with antibiotics, and then implanted with naso-pharyngeal secretions from human subjects suffering from various forms of acute respiratory

disease. In such cultures as well as in HeLa cell tissue cultures, viruses grow readily showing similar and unique cytopathogenic effects. In human beings and in rabbits, potent type-specific neutralizing antibodies are produced. Likewise, complement-fixation technics have been devised showing the production of comparatively large amounts of complement-fixing antigens and antibodies. These are group-specific but not type-specific. They are of great importance since serologic diagnosis is, of necessity, the routine method of final diagnosis in virus diseases.[5] All types of A-P-C† viruses cause frequent infections in man.

SOME PROPERTIES OF ADENOIDAL-PHARYNGEAL-CONJUNCTIVAL VIRUSES[10]

1. Production of unique cytopathogenic changes in:
   a. Human explant cultures (epitheliotropic)
   b. HeLa cells, with acid production
   c. Monkey kidney
   d. Rabbit trachea
2. Apathogenic for laboratory animals.
3. Ether resistant.
4. Heat labile (56°C. for 30 min.).
5. Filtrable (sintered glass, Mandler).
6. Resistant to antibiotics.
7. Type-specific neutralization.
8. Group-reactive complement-fixing antigens and antibodies (not type-specific).
9. Soluble antigen.

While the complement-fixation technics will not determine the specific type of virus causing infection, they do provide a generally available method, limited only by antigen supplies, for detecting infections with the A-P-C† group.

The importance of serologic (as opposed to clinical) diagnosis is also emphasized by the Virus Reference Laboratory at Colindale in London.[5] Their results in examination of sera from patients with presumed virus infections of the respiratory tract indicate the advisability, when feasible, of testing for antibodies to Strep. M. G., influenza viruses, psittacosis-L. G. V. group of viruses and R. burneti (for Q fever), some of which are amenable to antibiotic therapy.

Huebner and his associates[11] also state that the A-P-C† viruses have been isolated from the adenoids and tonsils of a majority of persons undergoing surgical removal of these organs, by growing these tissues in tissue culture, and suggest that a possible role in persistent chronic disease of tonsils and adenoids should be investigated.

The implications of this work are tremendous. First and simply, quoting from a personal interview with Huebner: "The way we look at it here, this is a problem of multiple respiratory diseases, caused by several different agents. The problem will not be solved by taking up arms against a fictitious thing called 'the common cold'." Secondly, by the application of the Salk vaccine technic, it is conceivable that a vaccine could be prepared which would effectively prevent many illnesses now classified as "common colds." The development of antibodies, the availability of antigen in large quantities, and the widespread occurrence of these illnesses all point to the desirability, practicability and usefulness of such a vaccine. As we all know, there is currently available no satisfactory vaccine for the prevention of the common cold, although many preparations masquerade as such.

TREATMENT AND PROPHYLAXIS

A NIHILISTIC but intellectually honest answer to the treatment of the common cold was given in 1954 as follows:[6]

"No drug or combination of drugs acts specifically in the prophylaxis or treatment of the common cold. Many nostrums and remedies have been advocated for either or both of these purposes, such as alkalis, vitamins, laxatives, antihistamine drugs, and many others: none of them can be shown to be effective in controlled studies. The physician can often obtain symptomatic relief for his patient by prescribing aspirin, codeine, atropine, papaverine or combinations of these drugs."

To these latter measures we might add conservative decongestive therapy either in the form of nose-drops, sprays or inhalations, and also the salutary, albeit temporary relief, secondary to the tender ministrations of a skillful and sympathetic otolaryngologist who "shrinks, sucks and soothes."

The problem of antibiotics in the therapy of the common cold and related infections is acute and much debated today. All of us must

agree with the A.M.A. editorialist[7] that they are essentially worthless and may be hazardous.

THE studies of Huebner[4] indicate that the A-P-C† viruses are resistant to all antibiotics currently available. This, however, does not fully answer the question for the physician in this era when patients demand early and effective therapy. What of the not-so-mythical "secondary invader?" Which among us is astute enough to know which patient, suffering from acute febrile catarrh, will develop complicating sinusitis, otitis, pneumonitis, lung abscess, nephritis, or one of the rheumatic states? I, for one do not possess that degree of astuteness. Therefore, for example, during the multiple febrile respiratory epidemics of the past winter, I have much more often than not prescribed an antibiotic in the tetracycline group, chosen for its versatility, and its reportedly relatively low rate of toxicity and sensitivity. I have done this with full honesty, realizing that the drug might not actually be helpful but probably would not be harmful, except to the patient's purse. To low-income patients, I try to dispense samples. I have observed in a large and, of course, uncontrolled series none of the above complications. I fully understand that many, if not all, of these infections might have been self-limited and capable of spontaneous cure. Yet, in one clinic patient with a dubious past history of rheumatic fever but without evidence of carditis, I withheld antibiotics in the presence of an acute "common cold." Two and one-half weeks later I admitted the same patient to the hospital with acute rheumatic fever. This does not constitute scientific proof. But it did impress me. I realize that this is scientific heresy and uncontrolled therapy—yet as an individual physician in private practice, my job is to rehabilitate the patient as rapidly as possible. Middle ear, pulmonary, nephritic and rheumatic complications might lead to prolonged disability. I have deliberately avoided penicillin, except where specifically indicated, because of its relatively high incidence of allergic and anaphylactic reactions, but freely acknowledge the abundant and possibly excessive use of tetracycline.

Now that I have spoken my personal piece, as an antidote I quote again an American Medical Association editorialist.[7]

"Three causes of untoward reaction following the giving of antibiotics are now recognized: toxic reactions to too large a dose of the drug, hypersensitivity reactions, and the favoring of an overgrowth of pathogens normally suppressed by the organism inhibited by the antibiotics. In working with so valuable a group of therapeutic agents, constant vigilance is required to prevent their falling into disrepute through injudicious use."

With this none of us can argue. We can wonder—when we see a patient at home or in the office—how we can be immediately sure regarding the judicious or injudicious use of these drugs. At the risk of sounding cynical, "judicious use" might apply to a patient who recovered promptly without complications or drug toxicity; and "injudicious" use when recovery is delayed or complications develop.

I agree wholeheartedly with the recent observations of Cronk *et al.*[8] that the administration of oral penicillin and/or an antihistamine does not materially influence the recovery of the average patient with non-specific and afebrile upper respiratory infection. I agree also with them, in principle, that chemotherapeutic and antibiotic agents have found common use in recent years in many self-limited and relatively harmless diseases and accept my culpability in this regard. However, when I see at home a febrile and prostrated patient with an upper respiratory disease and with questionable pulmonary or middle ear signs, I would implore the assistance of a divining rod or radar to inform me whether the disease will remain "self-limited and harmless." I am aware of the existence of a nearby Virus Reference Laboratory. I fully realize that the bacteriologic diagnosis of some of the less common infections, such as the enteric fevers, may be obscured.

Certain groups of patients merit special consideration for antibiotic therapy in the presence of acute upper respiratory infections: those with diabetes, chronic pulmonary disease, bronchial asthma of the infectious type, the nephritic, those with rheumatoid or rheumatic

diatheses, the very young and the very aged, and those who are prone to recurrent middle ear and sinus infection. Other groups might well be added to this. In these patients, we country doctors may merit less academic flagellation for the "injudicious" use of antibiotics. On a recent Tuesday night, I refused to administer penicillin to a diabetic patient who "felt a cold coming on." On Saturday night, my associate admitted him to the hospital in coma precipitated by pneumonitis. Such incidents leave indelible, if not entirely academic, impressions.

The director of the chest department of a large eastern clinic told me that the incidence of empyema, bronchiectasis and lung abscess at his clinic has been much less in the past five years. He attributes this to widespread, even if "injudicious," use of the more versatile antibiotics. His is probably not a unique experience and is provocative of much thought.

Let us hope that a multivalent and specific vaccine will some day be available for the prevention of the "common cold," whether it be a single entity or a composite of individual virus infections. Until that time, let us join with Dr. Andrewes[3] in this statement of optimism:

"I am, however, confident that, even if it is the last human infection to be overcome, science will abolish the common cold in the end."

SUMMARY

THE common cold is discussed in reference to morbidity, signs and symptoms, recent epidemiologic and virologic studies, prophylaxis and treatment, with particular emphasis on the problem of antibiotic therapy and the plight of the individual practitioner in this regard.

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The Solitary Circumscribed Dense Pulmonary Lesion*

While the commonest cause of a solitary dense pulmonary lesion is a tuberculoma, enough of them are malignant to justify careful study. The differential diagnosis is spelled out here by Doctors Cohen and Bortone.

With the widespread use of chest x-ray films, it is not uncommon to find solitary circumscribed dense pulmonary lesions. It is important to do something about this finding, because a high proportion of these shadows later prove to be malignant, particularly in individuals over forty years of age.

ETIOLOGY

There are two broad categories of solitary circumscribed dense pulmonary lesions: (1) *Tuberculous etiology* — usually called a tuberculoma. This is most often a previously aerated cavity which becomes filled in with inspissated exudate. The tuberculoma may or may not be associated with calcific deposits. (2) *Non-tuberculous etiology* — the peripheral type of carcinoma of the lung is the most important. Some of the other possibilities to be entertained in the differential diagnosis are the metastatic pulmonary lesion, hamartoma, bronchogenic cyst, filled-in lung abscess or bronchiectatic cavity, encapsulated effusion, inflammatory lesion, localized fungus infections, and echinococcus cyst. Management depends on whether we are dealing with a known case of pulmonary tuberculosis which has been observed for a period of time (and in which a solitary circumscribed dense lesion appears) or whether the patient is seen for the first time with such a shadow and usually without antecendent chest x-ray films for comparison. The latter are the type of cases we are concerned with in this presentation and are of most interest and concern to the general practitioner and surgeon.

DIAGNOSIS

Prompt diagnostic work-up is imperative in such instances. What diagnostic tools may be used?

1. *History*—(a) Is there a history of a recent acute pulmonary infection? A round shadow may represent a residue of an inflammatory parenchymal process or an encapsulated effusion. A lateral film will most often, by the contour of the shadow in this projection, give the clue to loculated fluid, the characteristic appearance being spindle or elliptical in shape. (b) Does the patient give a history of or do symptoms and signs suggest carcinoma elsewhere? Round dense lesions are metastatic most often from such primary sites as the kid-

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ney, adrenal, testicle and prostate. (c) A history of chest pain, hemoptysis and weight loss may suggest carcinoma. Yet many patients with the type of lesion referred to, do not have symptoms; or their symptoms are not distinctive enough to permit a diagnosis.

2. *Age*—The bronchogenic cyst is seen most frequently in children or young adults. Hamartoma is seen in young adults and also in older persons. Carcinoma of the lung occurs most frequently in males above the age of forty.

3. *Intradermal tests*—This can be done for tuberculosis and fungus infections such as coccidioidomycosis and histoplasmosis and for hydatid disease. A negative test to 1 milligram of O.T. or second strength of P.P.D. is valuable in excluding tuberculosis.

4. *Examination of the sputum and/or gastric washings for tubercle bacilli*—As a rule, such examinations are not informative.

5. *Bronchoscopy* — This is frequently advocated as a routine diagnostic measure but it will generally reveal no significant abnormality in the major bronchial tree.

6. *Cytology of aspirated bronchial secretions*—A positive Papanicolaou smear is uncommon in peripheral cancer. The validity of the report will depend, in large part, on the experience of the practitioner using this technic.

7. *Sedimentation rate* — Elevated sedimentation may point to an inflammatory or malignant lesion.

8. *X-ray findings*—Physical examination of the lungs is almost invariably negative. Roentgen visualization is therefore of paramount importance. The actual density gives no clue as to the diagnosis. Rigler [1] says that a notching or umbilication of a border of the shadow is highly suggestive of carcinoma. The location and size of the lesion are of help in occasional cases. Tuberculomas are most commonly situated in the apical posterior portions of the upper lobes. Increase in size accentuates the likelihood of malignancy but this is not invariably true. Increase sometimes occurs with an inflammatory process, a tuberculoma, or a hamartoma. Positional films and laminograms should be taken for accurate localization and to determine the presence or absence of calcification. The latter is a sign of a benign lesion except for the very rare instance when carcinoma envelops a calcified tuberculous focus. Incidentally, about 25 per cent of hamartomas show calcification.

MANAGEMENT

IF THE patient has the type of lesion under discussion and if a final etiologic diagnosis is not possible after available procedures have been used one may resort to the following: (1) frequent observation clinically and by serial x-ray films; (2) administer a trial dose of x-ray therapy; (3) perform exploratory thoracotomy with removal of the lesion. Those who follow the first course must assume responsibility for unfavorable progression of the lesion. Only if the density decreases in size can carcinoma be ruled out. If it remains unchanged for weeks or even months, malignancy cannot be excluded. A test dose of irradiation merely reveals whether the lesion is sensitive to x-ray. This does not provide the pathologic diagnosis. The consensus of opinion, to which we subscribe, is as follows: if an etiologic diagnosis of a non-calcified solitary circumscribed dense lesion cannot be made after a few weeks of proper study, carcinoma should be suspected, particularly in the patient in the fourth or later decade of life. Exploratory thoracotomy should be done if there is no contra-indication. This view is justified by the very low postoperative morbidity and mortality, the positive diagnosis obtained and by the higher rate of curability. Moreover, there is very little reason for the delay of the surgical approach because practically all of the lesions encountered in differential diagnosis—such as cyst, abscess, tuberculoma and others—are actually best treated by pulmonary resection. The management must be based on the knowledge that a high proportion of such lesions are malignant.

1. Rigler, L. G.: "A New Roentgen Sign of Malignancy in the Solitary Pulmonary Nodule," J.A.M.A., March 12, 1955, page 907.

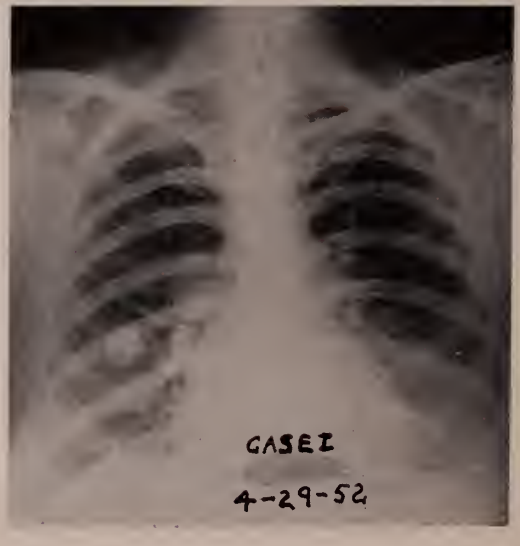
FINDINGS AND RESULTS

THE validity of this point of view is emphasized by published experiences some of which are cited briefly. Thus, Efler [2] reported on 24 cases in which no definite pre-operative diagnosis was made and all were considered benign. Postoperatively, carcinoma of the lung was found in 4 cases; cyst in 7; tuberculoma in 8; benign tumor in 3; and diaphragmatic hernia in 2. There were no surgical deaths. In the same year, O'Brien and Tuttle [3] reported on 21 cases with an uncertain clinical diagnosis. Six patients were completely asymptomatic. Bronchogenic carcinoma was present in 8; abscess in 2; sarcoma in 1; cyst in 1; and hamartoma in 1. The postoperative mortality was nil. In a group of 67 cases subjected to surgery, with only one death, Davis [4] found that 57 per cent were malignant neoplasms. Storey [5] in his experience with 40 cases among military personnel found malignancy in 17.5 per cent and tuberculoma in 70 per cent. There was no mortality. Postoperative morbidity was minimal. Hood, *et al.*[6] in 156 surgically excised lesions reported malignancy in 35 per cent. No lesion that exhibited calcification on x-ray was malignant. There were 2 deaths both in elderly patients.

At the Pollak Hospital we have encountered over the years, a number of patients with solitary dense lesions. We record here only the eleven cases confirmed by operation (up to January 1, 1955) as being actually intrapulmonary and in which resection was performed. The pathologic diagnoses were: tuberculoma in 3 or 27 per cent; primary cancer of lung, 2 or 18 per cent; bronchogenic cyst in 1 case; bronchiectatic cavity (filled in) in 1; bronchiectasis with organizing pneumonitis in 1; hamartoma in 1; echinococcus cyst in 1; and solitary caseous mass (etiology undetermined) in 1. A correct pre-operative diagnosis was made in 7. Bronchoscopy was done in 6 cases with gross abnormalities visualized in 2, neither of which proved to be carcinoma. Ten patients had an uneventful postoperative course. One patient developed atelectasis which was relieved by bronchoscopy. As of January 1, 1955, nine patients are still living. One, who had a tuberculoma removed, died outside of the hospital many months later from acute alcoholism and exposure. One of the cancer patients is dead and the other is still living 14 months postoperative. Here are 4 case reports, each illustrating a different entity.

CASE ONE

A female, age 33, had a history of cough of 2 years' duration and right sided chest pain for 6 months. Tuberculin test was positive. Bronchoscopy was not done. Sputum was negative. The diagnosis was tuberculoma. She received preliminary chemotherapy and the lesion was then enucleated from the right lower lobe. Pathologic diagnosis was tuberculoma. Postoperative course was uneventful. (Figures 1 and 2)



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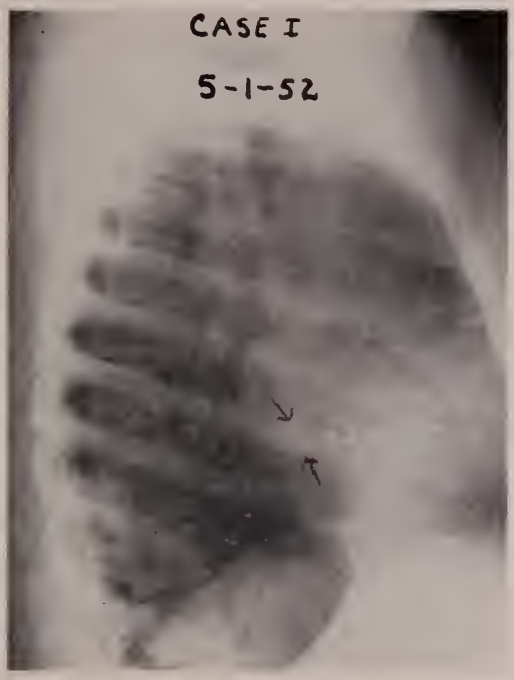

Figure 2.

CASE TWO

In 1941, at the army induction examination, an abnormality was noted on this man's chest x-ray. He had no complaints then but was referred to our clinic. He was seen again in 1951, when hospitalization was advised because of increase in size of shadow. He was then 37 years old and asymptomatic. Sputum was negative for tubercle bacilli. Bronchoscopy was not done. Clinical diagnosis was probable hamartoma or carcinoma. Two months later, a hard mass, two inches in diameter was removed from the anterior segment of the right middle lobe. Course uneventful. Pathologic diagnosis: hamartoma. (Figures 3, 4 and 5)

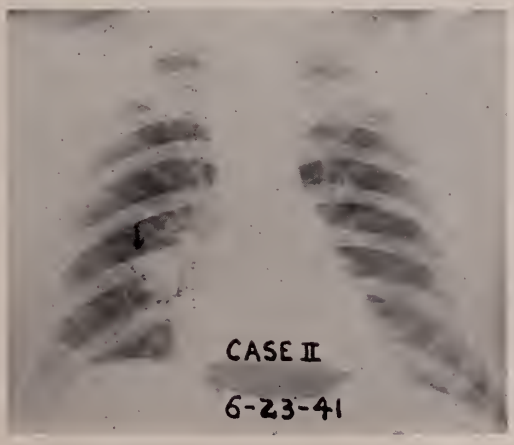

Figure 3.

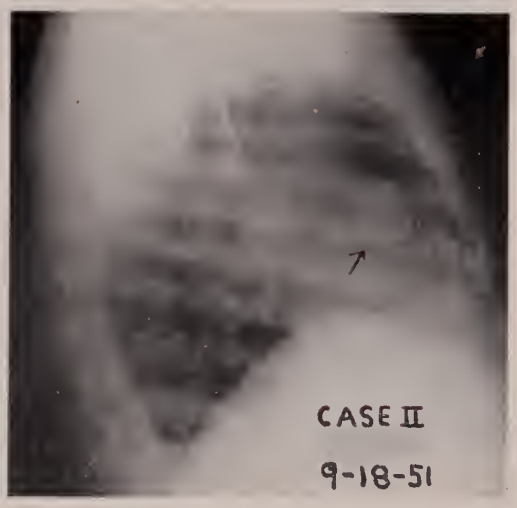

Figure 4.

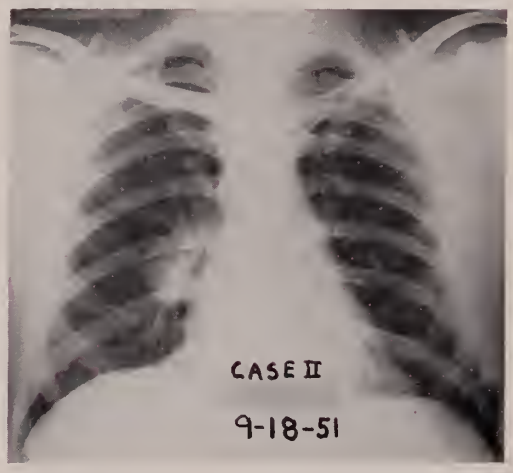

Figure 5.

CASE THREE

A female, age 51, complained of cough, weight loss and occasional left sided chest pain; duration: two months. She had a mitral stenosis. Bronchoscopy showed some swelling in the region of the left upper lumen bronchus. Biopsy was negative for malignancy. Papanicolaou smear was negative. Bronchogram indicated bronchial block. (Figure 6) Clinical diagnosis was carcinoma of lung. Left upper lobectomy was done and a fluctuant mass containing thick greenish fluid was found in the left upper lobe. Near the origin of the upper lobe, the bronchus was stenosed. Pathologic diagnosis bronchiectatic cavity with surrounding organizing pneumonitis, probably secondary to calcified obstructive adenopathy. (See upper arrow on Figure 7) Course Uneventful.

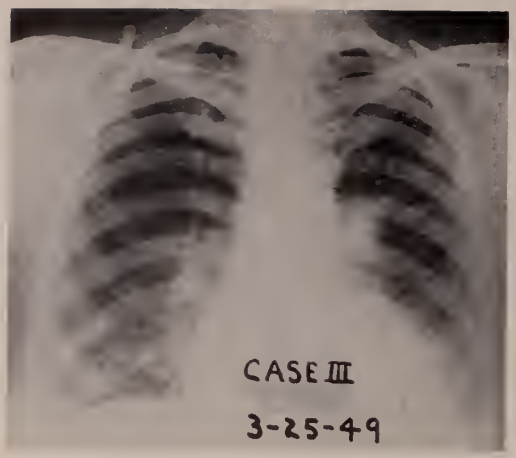

Figure 6.

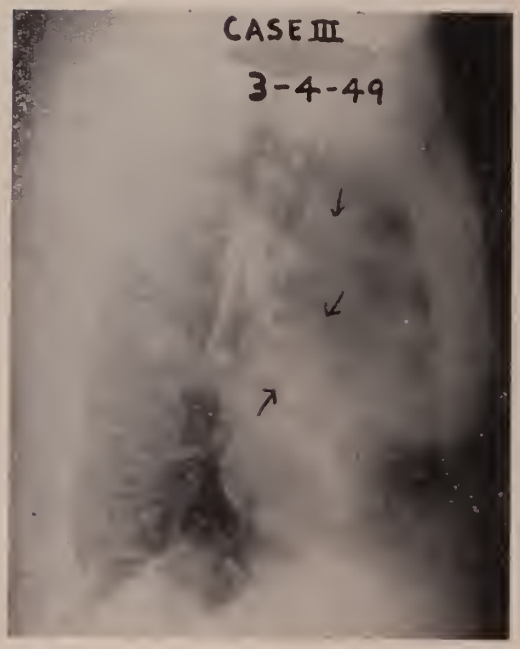

Figure 7.

CASE FOUR

For 2 years, a 72 year old man had had constant cough. He was given antibiotics with some improvement. He had hemoptysis a few months later. There was no chest pain, but he had lost twenty pounds in one year. Sputum was negative. Bronchoscopy was negative. (Figure 8) Clinical diagnosis: carcinoma of lung. A resection of lingula of left upper lobe was done. The patient was not a good surgical risk and the respiratory reserve warranted only a limited resection. He developed atelectasis of lower lobe which cleared with bronchoscopic suction. Pathological diagnosis was squamous cell carcinoma with secondary cavitation. He was alive as of January 1955, two years after the operation.

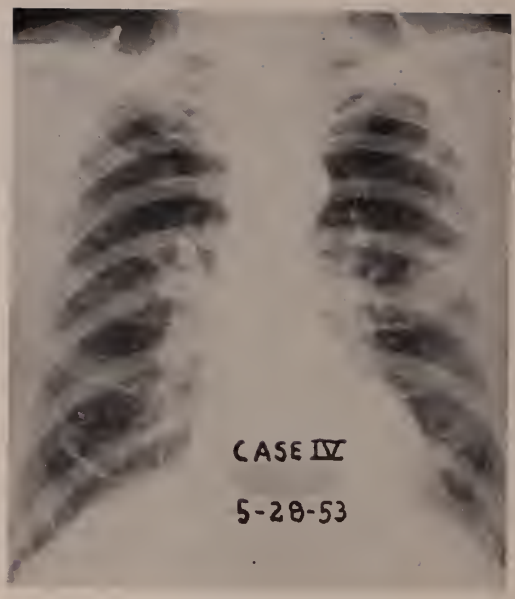

Figure 8.

SUMMARY

THE importance and the need for sound management of the isolated dense round pulmonary lesion are stressed. The high incidence of bronchogenic carcinoma particularly in individuals over forty years of age justifies exploratory thoracotomy. Reference is made to eleven cases in which resection was performed at the Pollak Hospital for Chest Diseases. The incidence of cancer of the lung was 18 per cent and that of tuberculoma 27 per cent.

Appreciation is expressed to Dr. I. Earle Gerber, Director of Laboratories, for his study and reports of the pathologic specimens.

Medical Center

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Extra-Cardiac Factors in the Management of the Cardiac Patient*

Too many physicians treat the heart rather than the patient. In this different approach, the authors put the spotlight on extra-cardiac factors: emotions, nutrition, anemia, protein metabolism, thyroid activity and so on.

The year 1954 was the healthiest on record. Our national death rate tumbled to an all-time low of 9.2 per thousand population — a drop of 5 per cent over the previous year. But this is no cause for smugness. We certainly cannot boast of progress in cardiovascular disease.

Last year nearly one-half of all the people who died in America died of heart disease. A large number were men and women in their productive years of life. Heart disease is the greatest hazard of life in modern society. Deadlier than traffic accidents, cancer, pneumonia and tuberculosis put together; deadlier for America than our last great war. The rising slaughter of our people from heart trouble stands out as a challenge to government leaders, industrialists, economists, educators and to us of the medical profession.

An aroused national interest in the study and control of heart disease began in 1945. From that time on the organized efforts of groups such as the Life Insurance Medical Research Fund, American Heart Association, The Council on Rheumatic Fever and Congenital Heart Disease, U. S. Public Health Service, and others have spotlighted public opinion, stimulated and financed countless research projects in many universities, medical and pharmaceutical centers throughout this country.

We might briefly call to mind the tremendous strides that have been made in some phases of heart disease control:

(1) Definitive diagnosis of congenital heart diseases and residual valvular deformities of rheumatic heart disease by modern x-ray technics and cardiac catheterization studies.

(2) Surgical correction of many valvular, septal and vascular defects.

(3) Chemotherapeutic and antibiotic prophylaxis and therapy of rheumatic heart disease, subacute bacterial endocarditis, and cardiovascular syphilis.

(4) Anticoagulant therapy in the management of coronary thrombosis and other thrombo-embolic diseases.

(5) A more scientific therapeutic approach in the management of hypertension and hypertensive heart disease by the use of newer anti-hypertensive drugs and surgical sympathectomy.

(6) A more rational physiologic therapeutic approach by the clinician in the management of the failing heart.

*Read April 20, 1955, before the Cardiovascular Section of The Medical Society of New Jersey at its 189th Annual Meeting in Atlantic City.

All of these advances we recognize with due pride and humble gratitude as stemming from the tireless efforts of the researchers, physiologists, cardiologists, pharmacologists, surgeons, and teaching clinicians who have made possible such progress these past ten years. This leads the authors to the title of this paper: "*Extra*-Cardiac Factors in the Comprehensive Management of the Cardiac Patient."

THE spotlight that has been shining so brightly upon heart disease has had its eye beam focused too narrowly on the heart *per se*. As a result, many contributing physiologic dysfunctions and associated pathologic states are often overlooked in the management of cardiac diseases. As clinicians in this resort area† we have had the opportunity of seeing patients under management of competent cardiologists from many parts of this country and we have been repeatedly impressed with the need for "extra-cardiac" therapy in the welfare of some of these patients.

This clinical observation is further substantiated by work in our local cardiac outpatient clinics and by observing in cardiac clinics in other cities. Once a patient has passed the scrutiny and studies of his original work-up and has convinced the examiner that he has organic heart disease, his label "cardiac" from then on is frequently misleading. It focuses the sight of the attending clinician on the too narrow evaluation of weight gain, blood pressure, lung bases and edema areas. Interrogations chiefly concern shortness of breath and pain. Therapy is directed primarily toward the use of nitroglycerine, digitalis, diuretics, and a low salt diet.

If the records of our chronic cardiacs are carefully perused, their histories carefully retaken and their physical examinations carefully re-done, it is amazing the number who can be aided by other measures. Frequently additional diagnoses are uncovered and occasionally a so called "chronic cardiac" is found who really belongs in a bronchoscopic, allergic or general medical clinic.

Many well-to-do and middle class patients as well as the patients who attend out-patient clinics are woefully inadequate in their knowledge of balanced menus and general healthful living habits. Many of these latter patients are, of course, financially unable to provide for themselves the necessary high protein, vitamin re-inforced diets prescribed. Adequate and proper food is essential for the prevention of the anemia, hypoproteinemia, and borderline deficiency states that so frequently accompany and magnify the disabilities of chronic heart disease. Some of these patients are also chronic users of alcohol, which deprives the body of protein and vitamin intake even though the caloric balance may be well maintained. Many need more beefsteak, eggs and fresh fruits and less digitalis and mercurial diuretics.

Increasing significance must be attached to nutritional deficiencies in their relationship to heart disease. In patients with recurrent chronic heart failure the maintenance of nutritional balance is most vital and centers around replacement of depleted body stores, as well as restoration of deranged myocardial metabolism.

VITAMIN B or C deficiency should always be considered where there is "heart failure" with no apparent cause, if digitalis is ineffective. Early symptoms are often misinterpreted because the clinical picture is not specifically characteristic. A valuable clue is a history of a poor diet and vitamin deficiency-data about which the busy clinician is often ill informed. Vitamin deficiency frequently exists without clinical evidence of true beri-beri, pellagra or scurvy. It has also been found that in chronic failure there is a greatly reduced thiamin and co-carboxy'ase content of the tissues.

Deficient body protein is often overlooked in cardiac failure. With an alteration in protein metabolism, heart failure may remain disturbingly refractory to treatment. This hypoproteinemic state calls for a high protein intake with a minimum of salt, or, in severe cases, parenteral protein. Protein deficiency may exist in the presence of a fairly normal serum-protein level and a considerable depletion of protein stores may be present without being re-

†Atlantic City.

flected in the usual laboratory tests. Not infrequently mild subclinical deficiency states exist in both private and clinic patients.

In "chronic failure" patients, when these deficiencies are corrected by replacement of depleted protein and/or vitamin stores, we have noted that improvement often follows. The tendency to edema decreases, the requirement of digitalis and diuretics is lessened and, not infrequently, these drugs are not even needed in the control of these patients.

ANEMIA is a frequent and remedial "extra-cardiac" state. It is gratifying to see the number of patients with chronic heart disease whose digitalis requirements can be reduced, whose cardiac reserve can be enhanced and conserved by the simple correction of an associated anemia. The number of circulating erythrocytes and their hemoglobin content (and therefore, their oxygen carrying capacity) is vitally concerned with heart work. Our object in the management of a crippled heart is to strengthen its output and lighten its load. Insuring a good quality of circulating blood is a vital, but too often neglected part of cardiac management.

The discovery of anemia usually calls for iron replacement and hemopoietic stimulation. All too often in the normocytic and hypochromic anemias our attention ceases with the institution of therapy. But it is essential to "plug the hole in the bottom of the bucket," *i.e.,* to look for a chronic oozing peptic ulcer, rectal fissure or bleeding internal hemorrhoids and to ask all female patients about menorrhagia and menstrual frequency. Nutritional anemias are rare. Chronic infection such as a minor focus in the teeth, tonsils, sinuses or prostate may be etiologic with respect to bone marrow depression. We must find and eliminate the cause, not just treat the anemia.

Digestion and assimilation, (*i.e.,* "nutrition") are ultimately connected with mastication. Thus it behooves the clinician to evaluate the teeth and insist that his cardiac patients have adequate dentition. If one will routinely inspect the mouths, particularly of the clinic patients, it is appalling how many will be found to be edentulous, and how many will have a few useless snags which serve only to insure mal-occlusion. It is the clinician's responsibility to arrange for correction of any such state.

There is definite correlation between overweight and cardiovascular disease. We Americans are eating ourselves into early graves. We are a "fat-eating" people whose diets from childhood include plenty of cream, butter, ice cream and pastry. Although there are some clues to the contrary, there is ever increasing scientific evidence to implicate a relationship between the development of atherosclerosis—the basic histopathologic defect — and body fat and serum cholesterol ratios. There is sufficient evidence for the clinician to stress the need for weight reduction in the obese cardiac. A thirty-pound weight drop in the obese hypertensive cardiac in borderline failure is frequently attended by a 30 millimeter mercury drop in blood pressure and an accompanying increased cardiac output. This is a vitally important "extra-cardiac" factor frequently insufficiently stressed.

DURING the past fifteen years, interest in stress and in the adaptation syndrome, (rationalized by Hans Selye) has assumed a practical implication in the treatment of heart disease. Stress may impose enough of a burden on the heart, either to precipitate failure or to aggravate pre-existing failure. A stress need be only relatively mild in a patient with very little cardiac reserve; or severe in a patient with a good cardiac reserve in order to precipitate failure. A simple upper respiratory infection illustrates the first situation, and the anoxia resulting from a bleeding ulcer may be severe enough to produce the latter. We should always be aware of stress *per se,* and its relationship by way of the cortical-hypothalamic-pituitary-adrenal-axis with its hormonal influence in altered physiology which greatly influences both cardiac and extra-cardiac factors.

Stress is a tremendous factor in psychosomatic relationships. The attitude of the physician alone can often produce dramatic effects. It can be responsible for condemning a patient to life long suffering because of "iatro-

genic" heart disease. By contrast, it can add years of happiness by helping a patient with chronic organic heart disease learn how to live compatibly with his disability.

After adequate study, the single most important duty of the clinician is the indoctrination of his patient with the nature and extent of his diagnosis. Whether this be a surgically remedial valvular lesion, a functionally and therapeutically unimportant heart murmur, or a chronic degenerative cardiovascular disease, explanation in understandable language to that patient is the first important step in therapy. The rapid pace of modern living has penetrated the consultation rooms and clinics. Busy, crowded clinics are often badly designed and staffed, so that they do not afford the privacy and time needed to establish proper patient-physician relationship. This relationship is essential in the management of any chronic disease. Especially is this true in the management of cardiac patients.

WE MUST look beyond the cardiac pathology *per se* and evaluate the cardiac patient as an individual human being. He needs more than just a "motor tune up." He needs help mentally, spiritually and from an overall general health viewpoint. We must look at the problem through the eyes of the patient. A patient properly oriented according to his "receptive I. Q.," makes the most manageable patient. Frequently, stemming from this orientation a successful relationship develops, upon which rests much of the success of all other therapeutic efforts of the physician. In our busy, often harassed and stressful lives how often we forget to appreciate and to apply this basic concept in the art of medicine!

There is a need for emphasizing *drug factors* other than diuretics and digitalis in cardiac management. The clinician is the target at which most pharmaceutical houses direct their attractive and appealing advertising fire. Many drugs are used because the doctor cannot resist the appeal in the dramatically illustrated brochures that daily deluge his mail box.

The analeptic drugs (amphetamine, dextroamphetamine, and so forth) are classed as relatively harmless "pick-up pills," that quickly change patients from worried, depressed people into happy, grateful patients. Actually these are potent, dangerous stimulants. Their injudicious use can be hazardous to the cardiac patient, particularly by their sympathomimetic effects on pulse acceleration and blood pressure elevation.

SEDATIVES (barbiturate and non-barbiturate alike) are too frequently prescribed. In no group of patients is the judicious prescribing of sedatives more helpful than in the cardiacs. However, we are all too ready to prescribe sedatives that assure "calm sleep" and "alert awakening" because the patients like them and the fan-mail pictures look so attractive. Be wary of the potentially toxic effects upon liver, kidneys and bone marrow. Weigh carefully the risks involved before dashing off your sedative prescriptions.

The centrally and peripherally acting anti-hypertensive drugs are extremely valuable, but also extremely hazardous medicaments. Hypotensive levels compatible with cerebral anoxia and thrombus induction can and do occur not infrequently. The clinician must lean more on the published reports of controlled studies by competent observers and less on the graphs and diagrams of pharmaceutical houses. Already many of the anti-hypertensive drugs recently placed on the market and prescribed hastily by many physicians are proving too toxic or dangerous for routine use and are being discarded.

Measles, infectious mononucleosis, infectious hepatitis and the pneumonias are capable of producing mild to virulent myocarditis. Electrocardiographic changes associated with these states have been repeatedly described in the literature. Awareness of this hazard must be stressed and a more prolonged and supervised convalescence insisted upon to prevent the serious cardiac damage so frequently overlooked in these diseases.

Diagnosis of the thyro-cardiac should be given more attention. Too often, the apparent cardiac is treated for months or years for "primary" heart disease while the etiologic,

hypersecreting thyroid gland is completely overlooked. It is recognized, that, short of crisis, the myocardium tolerates long, continued thyroid over-activity prior to the onset of failure. These patients need antithyroid therapy and not digitalis. Any congestive failure patient whose pulse rate is not materially slowed by digitalis must be considered hyperthyroid until proved otherwise. This dictum is too frequently forgotten. With the present laboratory aids of PBI and RAI studies, definite diagnosis of thyroid dysfunction can now be accurately established. Medical management of the hyperthyroid is so successful and so quickly relieves the "whipped, tired out heart," that we must be alert to this etiologic possibility in failure patients. Hypothyroidism contributes to the etiology of heart disease also, but far less commonly. Myxedema has its well recognized clinical and electrocardiographic patterns. More frequently, however, we overlook the mild hypothyroid whose dyspnea and lassitude are so appreciably relieved by small doses of thyroid extract.

At the 1953 Annual Meeting of the American Medical Association, Dr. Paul D. White said that a nationwide research program is needed to evaluate age, race, climate, geographical location, occupation and other factors in the pathogenesis of heart disease. Much statistical information has been forthcoming under the capable leadership of outstanding cardiologists since that meeting. This information and its implied conclusions through the medium of journals, papers and meetings have been made available to all of us. We, the clinicians, who still see 80 per cent of these patients must utilize in a practical way this information in our diagnosis and therapy. Our responsibility is to make a conscientious, comprehensive clinical application of these discoveries in the great overall effort to lower the mortality and ease the suffering from heart disease.

SUMMARY

1. In cardiac management, clinicians frequently overlook and neglect the *extra*-cardiac factors.

2. Many of these factors are remedial and vitally affect the general health of the patient and the cardiac therapy.

3. A reminder is presented for all clinicians treating heart diseases: evaluate patients comprehensively, *i.e.* physically, psychologically, economically, and *periodically*.

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Amyotrophic Lateral Sclerosis

In the summer (1955) issue of *Neurology* (5:249) Kurland and Mulder report on studies in the epidemiology of amyotrophic lateral sclerosis. While opinion is not unanimous, some students of the subject say that amyotrophic lateral sclerosis is a non-inherited complex. Here Kurland and Mulder add six pedigrees with 34 affected individuals to previously available information supporting the hereditary nature of the disease. The familial aggregations in almost all pedigrees are compatible with a dominant form of inheritance. Kurland and Mulder believe that the hereditary factor may account for a significant proportion of all cases. Whether the etiology of sporadic cases differs from that of hereditary cases remains to be determined.

Some investigators believe that the muscular dysfunction in progressive muscular dystrophy is an inherited or acquired disturbance involving iron-actomysin and adenosine triphosphate. The latter causes contraction of muscle.

EUGENE REVITCH, M.D.

Plainfield

Psychiatric Aspects of Epilepsy

In this compact run-down of epilepsy, Dr. Revitch dispels several popular myths on the subject and opens the door to a fascinating outpost of neurology.

IF YOUR patient has epilepsy—the ordinary "idiopathic" epilepsy, is he likely to suffer intellectual deterioration? The answer is: generally no.[1] And in petit mal, the answer is unequivocally no. On the other hand, if epilepsy is associated with a structural brain lesion, there may or may not be intellectual impairment—depending on the site, nature and severity of the primary disorder.

There is a stubborn but erroneous popular idea that epileptics are often mentally retarded or deteriorated. There are even some physicians who accept this myth. One of the puzzlers is that older studies did show a high ratio of deterioration whereas more recent ones do not. The reason for this is that older authors studied institutional cases with a high ratio of deterioration, whereas more recent surveys[2,3] were on out-patients with a low frequency of deterioration. Lennox[4] found that only 16 per cent of out-patients showed mental deterioration whereas about 85 per cent of patients admitted to the Grieg Colony for Epileptics had deteriorated. Later studies by Collins and Lennox[5] of 300 private patients actually showed the prevalence of high intelligence. A third of their patients had IQs of 120 and above. This, however, may have been due to the elite character of Dr. Lennox's private practice. Current studies[6,7,8] show that mental deterioration is more frequent in symptomatic epilepsy with demonstrable brain lesion than in idiopathic epilepsy. Zimmerman *et al.*[8] have established that petit mal causes no intellectual impairment.

WHAT causes mental deterioration in some epileptics? Zimmerman *et al.*[8] in their recent studies, found a closer correlation with the age of onset than with frequency and length of the epileptic manifestations. The earlier the age of onset, the more likelihood for mental deterioration, according to these authors. Others[11] believe that control of seizures will arrest mental deterioration, particularly in children. Penfield[12] suggests that one attack may leave one patient with lesser function, whereas another will not deteriorate with a larger number of seizures. As deterioration progresses, the pneumoencephalogram shows cortical atrophy. Some patients may show temporary intellectual deficit close to the attack. Putnam and Merritt[13] describe episodes of dullness during which the patient is conscious of intellectual retardation lasting for periods of hours or days. This, however, is not real deterioration, since the impairment is reversible.

Mental deterioration is sometimes accompanied with neurologic changes. The whole complex was described as neuro-somatic deterioration.[14] These changes may consist in flexion of upper and lower extremities, dissolution of erect posture, parkinsonian features and pyramidal signs.

The question of mental deterioration in epilepsy can be answered as follows: (1) Only a small proportion of non-institutionalized epileptics show intellectual deterioration. (2) The deterioration is more frequent in symptomatic epilepsy with demonstrable brain damage. (3) Deterioration does *not* occur in petit mal seizures. (4) The age of onset, frequency and duration of seizures have an effect on intellectual impairment. The earlier the onset, the greater the chance of eventual deterioration. (5) The noxious effect of seizures is more pronounced in a child than in an adult. (6) Proper control of seizures may check the progress of deterioration. (7) Proper environment and proper pedagogy may improve what may seem initially to be an irreversible deterioration.

THE EPILEPTIC PERSONALITY

THE "epileptic personality," according to Bleuler,[15] is characterized by moodiness, outbursts of temper, cruelty, sensitivity, rigidity, pedantry, perseveration, and "stickiness" of affect. By the last trait, he meant the inability to shift the mood with modified circumstances, and persistence of the same emotional tone after the removal of the initial stimulus. So, he felt, trivial events would be accompanied with an intense affect. According to Clark[16] specific personality traits are inherent in idiopathic epilepsy. Most clinicians, however, reject the thesis that epileptics are endowed with a particular personality, though many will concede that being "branded" an epileptic is bound to have some effect on personality. Adherents of this view argue that the so-called "epileptic personality" (if any) is the result of, not a precursor of, the epilepsy.[17] Many students[17,18] have commented on the rich variety of personalities found among epileptics. When a consistent personality picture is shown, it is usually noticed only in patients with organic brain damage. It is the basic brain damage and not the epilepsy which is thus being profiled. Since idiopathic epileptics have no specific structural brain damage, it would appear that idiopathic epileptics have no characteristic personality picture.

To summarize, it would seem that personality traits such as decreased flexibility of thought, emotional constriction and lack of inner control are *not* characteristic of epilepsy but of brain damage, particularly if there is a focus in the temporal lobe. Epileptics *without* brain damage have a multiplicity of personality patterns not unlike the general population. Bleuler's[15] and Clark's[16] concept of epileptic personality is no longer accepted by most epileptologists.

EMOTIONAL PRECIPITATION

LENNOX[18] evaluates the relation between emotions and seizures in the following words: "As a gun may be fired by a very slight pressure on the trigger, convulsions may be set off by emotional disturbances which would produce only a storm of tears in an ordinary individual." Some psycho-analysts say that an epileptic seizure is a purposeful, unconscious activity, aimed at solving repressed conflicts. They do not see the emotion as a trigger mechanism. They ask us to believe that the seizure itself is an expression of conflictual emotions such as murderous rage, extragenital orgasm, or longing to return to the fetal state.

Barker[19] concludes: "The petit mal attack abolishes consciousness when unconscious emotional responses and their demands for action seriously endanger the patient's consciously acceptable pattern of behavior." He speaks for other psycho-analysts in labelling petit mal as a symbolic expression of repressed aggressive urges, or as transient sleep states which allow the dissipation in unconscious fantasy of repressed wishes. And Karpman[20] accomplishes the final *reductio ad absurdum* of this psycho-analytic doctrine in these words:

"In a seizure, the epileptic experiences birth, death, and sometimes rebirth. One thing is sure: the seizure imitates joy in dying. It is well known that persons wish to die at the supreme moment of the orgasm. The epileptic patient flees the dangers of life into a temporary death, then to be reborn. And since the epileptic must have total amnesia after the seizure, he dare not recall his phantasies." Of course, most epileptologists find the psychoanalytic concept completely unacceptable and devoid of all scientific basis. The relationship between emotional precipitation and seizures will be found not in psychologic speculations but in physiology. The relationship of emotions with secretion of epinephrine has been a well established fact since the classical work of Cannon.

Bonvallet *et al.*[21] demonstrated that epinephrine activates the electrical activity of the cortex. Magoun[22] shows that intravenous injection of epinephrine will induce the same electrical activity in the brain as stress. Szatmani *et al.*[23] have shown that adrenochrome (a derivative of epinephrine) may produce in epileptics a feeling of an oncoming seizure as well as activation of electroencephalographic abnormalities. Consequently, the best tentative explanation of emotional precipitation of seizures is that a stressful emotion will increase the secretion of epinephrine or similar substances, which, in their turn (probably through the medium of the mesodiencephalic reticular system) will activate the epileptic discharge. For a survey of the role of epinephrine in epilepsy, see Fabricant.[24] Since anger precipitates seizures more frequently than any other emotion, it would be interesting to study the effect of nor-epinephrine on the epileptogenic focus. This is based on findings by Funkenstein[25] that anger produces secretion of nor-epinephrine or its derivatives, while fear will increase the secretion of epinephrine.

A 26-year old male, with a short history of minor confusions, fugues and *deja vu* phenomena, developed a grand mal seizure after losing a game of cards to his brother. Electroencephalogram revealed occasional 5 per second hypersynchronous bursts and occasional focal slowing in the right temporal and parietal area. Although the patient came originally for his seizures, his emotional conflicts were so severe that he considered them more important than the epileptic manifestations. There has always been a great deal of rivalry between him and his brother. The emotional significance of losing the game was expressed in one of the interviews as follows: "The only reason I play cards with my brother is to beat him." Losing the game produced in him a severe rage reaction which probably set off the seizure through activation of the epileptogenic focus. At later interviews, homosexual preoccupations, incestuous fears, feeling of worthlessness, distrust of people and frequent depressive moods with impotent rages, were elicited. He has had no grand mal seizures or states of confusion with administration of anti-convulsive medication for a period of two years (the time he was followed) and his hostile feelings toward his brother have abated to some extent.

SENSORY AND INTELLECTUAL PRECIPITATION

Sensory and intellectual precipitation of seizures is mediated directly through neural pathways to the epileptogenic focus. Sensory precipitation is also called reflex epilepsy. Rae[26] has reported a case of reflex epilepsy which can be used as an illustration:

A soldier sustained a penetrating right frontal head wound. Twelve months later he began to suffer from grand mal seizures. Ten years later he sustained an injury to the left foot and since that time, sensory stimulation to the outer margin of the left foot always precipitated a jacksonian seizure on the left side. Peripheral stimulation excited the epileptogenic focus located in the corresponding area of the brain.

Seizures precipitated by light or the flicker effect (photic stimulation) or by unexpected sounds, seem to belong to the same group. Musicogenic epilepsy is a very rare variety of seizures, precipitated by music. According to Penfield,[12] only 20 cases have been described in the literature since 1884, and I am not certain whether the mechanism of precipitation is due to emotional factors induced by music or to a sensory effect.

In some patients a certain type of thinking and concentration may precipitate seizures. In surgical removal of epileptogenic foci, Penfield uses only local anesthesia, so that the patient remains conscious throughout the procedure. This gave him an opportunity to stim-

ulate various areas of the cortex and observe the objective and subjective results. The most fruitful and interesting results were obtained with stimulation of the temporal lobe, particularly in the vicinity of the epileptogenic focus. Various experiences of memory which Penfield[27] called "recollective hallucinations" were obtained. Thus, for instance, the stimulation of the first temporal gyrus on the right side produced in one patient the experience of hearing a telephone conversation between his mother and aunt. Other patients could hear certain melodies or relive scenes of the past. In several of Penfield's cases, with an epileptogenic focus in one of the temporal lobes, recollection of specific events could produce a seizure. Thus, one of his patients experienced a grand mal seizure when he watched a demonstration of military tactics in which one of his classmates grabbed a rifle out of the hands of another cadet. A second attack took place when he saw a man grabbing his hat from the hands of the hat-check girl. Both incidents reminded the patient of an event several years prior to the seizures when he grabbed a stick out of the mouth of a dog while playing with the animal. At the operation, during the stimulation of a point in the first temporal convolution on the left side, he again relived the experience.

ANOTHER patient with a temporal lobe focus could precipitate a seizure when he sought to recall the name of a person or when he thought about seeing a person or a thing in the past. Obviously this type of precipitation is similar to reflex epilepsy and is connected with activation of a temporal lobe focus through pathways conducting memory mechanisms. Below is a case of psychomotor seizures precipitated by a visual impression, which in its turn may be connected with some consciously forgotten memory.

At the age of 13, a girl had an attack of bulbar poliomyelitis and spent a week in an "iron lung." During her illness she had high fever and was delirious. After recovery from the acute phase, her lower extremities were completely paralyzed and she was unable to hold her back erect. A brace was needed to keep her in a sitting position. The upper extremities remained atrophic. When I first saw her, 8 years later, she was a complete invalid, confined to a wheelchair. She developed her first grand mal seizure six months after recovery from the acute phase of poliomyelitis. A year following this seizure she started having the following paroxysmal phenomena: when she looks at the blueprints of modern homes or tries to visualize these blueprints or memorize certain incidents in the past she suddenly gets a feeling of tenseness in her epigastrium, like the sensation connected with fear. Then she repeats automatically, in rapid succession, "Marge, Jane, Helen, Ruth, Mary, Marge, Jane, Helen, Ruth Mary." During this episode she becomes pale, clammy, the pupils dilate, the eyes stare vacantly and she has an appearance of fright. The attacks terminate after several minutes, with a deep sleep. She is aware of the environment during these paroxysms but the whole episode leaves an impression of a lightning-like rapidity and she never remembers the uttered names afterwards. The attacks diminished in frequency with anti-convulsive medication. An electroencephalogram taken by Dr. Thomas Fitch showed spikes in both frontal leads. A year later, I did an electroencephalogram but by then these spikes had vanished.

In this case the focus, at least electroencephalographically, would seem to be in the frontal lobes. Attacks of "forced thinking" with a frontal focus have been described by Penfield.[36] However, the autonomic phenomena she exhibited would seem to point either to some deeper structures or to the temporal lobes. Wherever the focus may be, the case is illustrative of precipitation of a psychomotor seizure with a specific type of thinking involving visual impressions.

FUGUES AND AUTOMATIC BEHAVIOR

WE ARE able to distinguish three types of mental aberrations of epileptic origin, (a) attacks of mental aberrations which in themselves constitute an epileptic seizure, (b) interictal psychiatric conditions, (c) behavioral and emotional abnormalities connected with epileptic deterioration.

Paroxysms of dissolution of consciousness accompanied by fugues, furor, various more or less complex automatisms and dreamy states were formerly called epileptic equivalents, or epileptic twilight states. Electroencephalographic studies, operative observations and animal experimentation disclose a whole spectrum

of psychic seizures from various foci, the focus in the temporal lobe being the most important. The most recent addition to the family is hypothalamic and thalamic epilepsy introduced by the Gibbses in 1951[33]. According to these authors the ictal manifestations are characterized by attacks of rage, weeping and autonomic phenomena without complete amnesia for the seizure. Electroencephalographic pattern is specific, according to the authors,[33] and consists of 6 and 14 per second positive spikes appearing asynchronously in both midtemporal regions of the scalp.

In a previous publication[34] I described two male patients with attacks of depression lasting for several days to a week, which would terminate with an epigastric sensation followed by a severe outburst of rage. In one, 6 per second positive spikes described by Gibbs[33] could be elicited. In the other, only less specific activity could be found. The question of a possible thalamic and hypothalamic epilepsy in both cases was raised. I also reported[34] a case of autonomic epilepsy with attacks of tachycardia, flushing of the face feeling of anxiety and impending doom which had been previously, and erroneously, called a psychoneurosis. This patient also presented independent attacks of compulsion to hurt people with a knife, each paroxysm lasting only for a few minutes. The autonomic attacks were followed by a feeling of despondency and depression.

CHARACTER DISTURBANCE

INTERPAROXYSMAL characterologic disturbances are well known in psychomotor epilepsies with a focus in the temporal lobe. Revitch and Luzzi[35] described schizophrenic-like and psychopathic-like symptoms in epileptic patients with an electroencephalographic focus in the temporal region of the scalp. The psychiatric symptomatology so overshadowed the epileptic manifestations that these patients were mis-labelled schizophrenia or psychopathic personality. In other instances, seizures may be followed by post-ictal confusion lasting for several hours or days. Penfield[12] described post-ictal psychotic states lasting for days and characterized by depression, negativism, suspiciousness and auditory hallucinations.

PSYCHOTIC-LIKE REACTIONS

EPILEPTIC deterioration is frequently accompanied not only by impoverishment of cognitive functions but also by emotional and behavioral disorganization of psychotic intensity. Gastaut[36] supports the thesis that only epileptics with a temporal lobe focus deteriorate and that there is no deterioration in cases of idiopathic epilepsy. This is difficult to demonstrate. Frequent seizures in a child without symptoms referrable to a temporal lobe lesion may lead to a rapid deterioration with severe behavioral disorganization. An illustrative case follows.

This 8 year old girl has had a history of seizures since the age of 16 months. For the first 6 months she had 20 or 30 minor seizures a day. These were characterized by sudden loss of consciousness and falling down with arms and legs turned inward. At the age of 22 months the seizures suddenly ceased and recurred 2 years later. She was then 4½ years old. At that time she had several typical grand mal seizures a day until finally with anticonvulsive medication it was possible to reduce them to 3 or 4 nocturnal seizures during sleep. She had had a normal delivery and normal development up to the age of one year, when she had an attack of high fever of unknown origin. When she was 2½ years old her parents had already a distinct impression that she was slower in learning new things than her older sister. At the age of 5 it was necessary to remove her from the kindergarten due to excessive restlessness, poor sociability, and impulsive aggressiveness and destructiveness. By 7, she had learned how to read simple words and dress herself. But her intellectual capacity and behavior pattern then took a sharp turn for the worse. At the age of 8 she could no longer read and dress herself without help. By the time I examined her she lost fear of dangerous objects and was likely to put her hand on a hot stove or her finger in a moving fan. She started soiling and wetting. She would even ingest her own feces. In the office she grabbed an ampule from the table and bit off the tip, injuring her tongue. I had to remove the broken glass from her mouth with the finger since she would not spit it out. Neurologic examination was negative.

This case illustrates not only rapid deterioration in a child with seizures but also that many seizures diagnosed as "idiopathic" are actually traumatic. In this case I suspect an encephalitic process at the age of one year. A

thorough questioning could also elicit the focal pattern of her seizures, since the convulsions started in the right lower extremity and the same remained paralyzed for a short time (Todd's paralysis) during the post-ictal recovery.

DIFFERENTIAL DIAGNOSIS

THERE is no rule of thumb for differentiation of epileptic manifestations with psychiatric implications from the purely psychiatric phenomena. Space does not permit full discussion. In general the following problems connected with differential diagnosis seem to be the most frequent:

1. Determination of the nature of akinetic seizures, when hysterical or vasodepressor attacks should be differentiated from akinetic epilepsy.
2. Determination of the nature of attacks of anger with destructiveness, of confusional states and of various motor phenomena which do not follow the grand mal pattern, when the psychomotor or hypothalamic epilepsy should be differentiated from psychologic phenomena.
3. Determination of the nature of chronic behavioral disturbances which may be connected with epileptic deterioration or represent interictal manifestations in the temporal lobe epilepsies.

Electroencephalography may be of help if properly performed. An example of poor performance (technical errors and artefacts disregarded) is to take just one routine record when psychomotor or hypothalamic epilepsy is suspected, since the abnormal findings may be elicited in light sleep only. On the other hand properly interpreted electroencephalograms but improper clinical acumen may confuse rather than elucidate the problem. For instance many laboratories in recording abnormal activity make the diagnosis of epilepsy and even advise medication in the report. It may so happen that the referring physician knows little about electroencephalograms and the electroencephalographer, little about the referred case, so that the result of this "collaboration" is administration of an anticonvulsive drug to a child with a behavior disorder or to a non-epileptic who happens to have a borderline or not specifically normal record. Epilepsy should be diagnosed on clinical grounds with the electroencephalogram used as a supplementary laboratory procedure when the diagnosis is strongly suspected. Blind electroencephalographic readings without the knowledge of the clinical picture are more of a hindrance than help since they give false security and reliance on push button methods to those who are not well acquainted with the subject. As far as the clinical diagnosis is concerned, thorough, unhurried history taking will bring dividends when everything else fails.

UNFORTUNATELY too often purely psychiatric diagnoses such as hysteria or psychopathic personality are given because the examiner failed to scrutinize the initial motor and sensory phenomena of the seizures. The initial phenomena such as auras or adversive movements point to the focus of the seizure and frequently are the most important diagnostic cues. Since it is impossible to review this subject in this paper the reader is referred to the excellent book by Penfield and Kristiansen.[37] To illustrate the point here is a previously reported[34] case:

A young man had attacks of falling down, rolling on the floor with aimless flailing of the extremities and fighting those who approached him. Since several routine electroencephalograms were negative he was given diagnoses such as psychopathic personality and, later, schizophrenia. Yet a thorough history taking elicited mounting epigastric sensations and a visual aura preceding the seizure. This would refer to a focus in the temporal lobe. Only then, when the clinical diagnosis was practically certain, was a spike in the left temporal region obtained in light sleep. The reason for a positive tracing here was the clinical certainty which led us to pay special attention to the temporal leads particularly when the patient was in light sleep.

If grand mal seizures are accompanied by characterologic disorders, it is not sufficient to attribute the psychiatric picture to psychogenic causes or to the consequence of seizures. A temporal focus should be suspected. This focus may appear to be an unrecognized tumor of long standing as it happened in the case of Winkler *et al.*[38] On the other hand it happens often that a patient diagnosed as epileptic sometimes with the aid of or because of an

electroencephalogram, has to be taken out of the epileptic category and given a purely psychiatric diagnosis. I have noticed that hostile, paranoid individuals who have attacks of severe, destructive anger, fainting spells or spells of hyperventilation are frequently diagnosed as epileptics. Here only a thorough knowledge of psychiatric diagnosis, of initial phenomena in seizures, and of the value and limitations of electroencephalography will make diagnosis possible.

SUMMARY

1. Epileptic deterioration occurs mostly in epilepsies due to an organic brain lesion. Deterioration is rare in "idiopathic" epilepsy, and never occurs in petit mal attacks.

2. There are no specific personality traits common to all the epileptics and the personality traits elicited by various investigators are due not to epilepsy but to the underlying brain damage.

3. Emotional precipitation of seizures is due to secretion of epinephrine or similar substances activating the epileptogenic focus. With sensory or intellectual precipitation, activation is *via* various pathways.

4. Psychotic manifestations may be associated with psychomotor epilepsy, post-ictal confusion or with epileptic deterioration.

5. Differentiation between epilepsy and primary psychiatric disorders depends on a careful and detailed history, a meticulous neurologic study, and sound clinical acumen, with an assist from the electroencephalogram.

828 Madison Avenue

A bibliographic list of 38 citations appears in Dr. Revitch's reprints.

Protecting Children from Aspirin

To protect children from accidental poisoning from overdoses of aspirin and other salicylate drugs Food and Drug Administration is calling on manufactureres to use conspicuous package warnings that these preparations should be kept out of the reach of children. The recommended statements are "Warning — Keep Out of the Reach of Children," or "Warning—Keep This and All Medications Out of the Reach of Children." Instead of dosage instructions for children under three years of age, FDA recommends this statement on the label: "For Children Under 3 Years of Age, Consult Physician."

The advisory ruling is an outgrowth of recommendations made earlier in the year by a medical advisory panel, called in by FDA to consider how to safeguard children from accidental overdoses of these preparations.

Manufactureres have the privilege of using the recommended statements or similiar language of their own choice. They are given six months to make the changeover. Manufacturers are cooperating wholeheartedly in the campaign to protect children from this type of accident, which results in about 100 deaths a year, mostly among children under 5. The industry itself is about to undertake a national campaign to educate families to the dangers of accidental poisoning from various types of drugs, medicines and chemicals commonly kept in the home.

The new ruling does not apply to oil of wintergreen (which already carries a warning statement), effervescent salicylate preparations, or preparations of para-amino-salicylic acid and its salts, used only in the treatment of tuberculosis.

A. M. Sabety, M.D.

A. R. Abel, M.D.

East Orange

Diaphragmatic Hiatal Hernia*

Though generally dismissed as a trivial lesion, diaphragmatic hernia can cause serious symptoms. In the authors' opinion, surgical correction is indicated if more conservative methods fail. And it is dangerous to wait too long, as these cases show.

This presentation is based on a study of 24 cases of complicated hiatus hernias seen in Mountainside and Orange Memorial Hospitals during the past two years. The complications were stricture and ulceration of the lower esophagus and hemorrhage. There is widespread confusion as to the symptomatology, complications and especially indications for the correction of hiatal hernias. Yet this is the most common form of anatomic defect seen in the routine gastro-intestinal series. Its incidence is reported to be 9 per cent.

Many doctors think that hiatus hernia is an innocuous ailment causing only "dyspepsia" and other trivial symptoms. This is as erroneous as it is widespread. It is true that most people with hiatus hernias go through life without any symptoms referrable to this abnormality. On the other hand, some patients do show symptoms referrable to hiatus hernia which are extremely variable in character and degrees. In the beginning, the symptoms are minor distress, probably secondary to mild esophagitis. If not recognized and not treated promptly the esophagitis may proceed to ulceration and stricture, which rarely respond to conservative therapy. Once stricture and secondary shortening of the esophagus have been established, then surgical treatment not only becomes technically difficult, but recurrence of symptoms is an ever present danger. The following case illustrates the point.

CASE ONE

This 49-year old patient was admitted to Orange Memorial Hospital with difficulty in swallowing solid foods. Onset of symptoms had been gradual, starting 5 years ago with heart burn and flatulence. X-ray at that time had disclosed nothing abnormal except for a small hiatal hernia. After several months of conservative therapy with diet and periodic dilatation without success, esophagectomy, bilateral vagotomy and gastro-enterostomy had to be done.

Postoperatively, he did well for about one year. Then the pain recurred and he had hematemesis and tarry stools. Esophagoscopy at this time showed an acute esophagitis. It was thought that an "ulcer diathesis" was the primary reason. To improve the emptying of the stomach a subtotal gastrectomy was performed. Postoperative x-ray series showed very rapid emptying of the stomach. Yet, two months later, he was readmitted because of massive gastro-intestinal hemorrhage. Esophagograms at this time showed an ulceration at the gastro-esophageal junction. The patient is at present under strict ulcer regimen and in spite of it occasionally shows tarry stools.

This case demonstrates the inadequacy of surgical therapy, if the disease is allowed to

*Read April 18, 1955 before The Medical Society of New Jersey.

progress until fibrosis, shortening and stricture of the esophagus have occurred. Once these complications are established, it is impossible to correct the situation while preserving the physiologic factors responsible for unidirectional flow of food through the cardia. These factors are: the sling action of the diaphragmatic muscles, and to a much lesser degree, presence of a gas pocket in the stomach and the sphincteric action of the oblique muscles of the gastro-esophageal junction.

We made an anatomic study of the diaphragmatic muscle around the esophageal hiatus and found that the muscle fibers arch over and sling around the lower esophagus and thus prevent regurgitation of the gastric content into the esophagus. Such a study has been carried out by others and the same finding was demonstrated.

The second most common symptom in our series was bleeding. This did not seem to be related to the size and shape of the hernia. The bleeding may be occult or massive. The following case is an example of this type.

CASE TWO

This 50 year old female was being treated for five years prior to this admission for "chronic anemia," by administration of iron and liver as well as by periodic transfusions. Her hemoglobin was usually 5 to 7 Grams. She had persistent occult blood in her stools. A hiatal hernia was the only positive finding in repeated gastro-intestinal studies. This was corrected a year ago. Since then, she has not had any occult blood in the stools and her blood count has remained within normal limits.

In contrast to the above group are patients who have severe and massive hemorrhages. These usually are secondary to a far advanced ulceration in the herniated part of the stomach. A representative case of this type is the following:

CASE THREE

This 72 year old female was admitted to Orange Memorial Hospital with massive gastro-intestinal hemorrhage. Blood count at the time of admission showed 3.8 Grams of hemoglobin and a hematocrit of 27 per cent. This blood picture continued for 48 hours in spite of repeated transfusions. Barium study of the esophagus showed narrowing and ulceration at the esophago-gastric junction. Emergency resection of the ulcerated area and esophagogastrotomy were done. This patient made an uneventful recovery.

Bleeding may accompany the symptoms of the stricture as illustrated in the following case:

CASE FOUR

This 33-year old man was admitted with difficulty in swallowing, weight loss and anemia. Gastro-intestinal series showed stricture of the lower esophagus with an area suggestive of ulceration. Repeated transfusions, esophagoscopy and dilatation were of no benefit. He continued to bleed in spite of our therapy. Esophagectomy was done and the lower esophagus was resected. So far under strict ulcer regimen, he has been symptom free for 18 months after operation.

Occasionally, ulceration and perforation to an adjoining viscus may occur very suddenly. The following case represents such a type:

CASE FIVE

This 50-year old man was admitted to Mountainside Hospital with weight loss and inability to eat solid foods. He failed to respond to repeated dilatations. Lower esophageal resection was done and pathologic examination showed it to be consistent with the diagnosis of chronic ulceration of the gastro-esophageal junction. Postoperative x-ray series showed good functioning of the gastro-esophageal anastomosis. He was able to eat regular food on the tenth postoperative day. On the twelfth postoperative day he complained of some chest pain which responded to sedatives. On the thirteenth postoperative day, he had a sudden chest pain and vomiting of large quantities of arterial blood. He died a few minutes later. Post-mortem examination revealed an ulcer in the wall of the esophagus, proximal to the anastomosis. It had perforated directly into the arch of the aorta.

Before ulceration, fibrosis and stricture of the esophagus develop, the symptoms of esophagitis in conjunction with hiatus hernia should be recognized and corrected. Chronic dysphagia, heart burn and flatulence are the early signs of impending esophagitis. Surgical correction at this stage is relatively simple and effective.

CASE SIX

This 66-year old woman was admitted to Orange Memorial Hospital with dysphagia, regurgitation

and heart burn of many years' duration. Recently she noticed increase in pain and dysphagia. Esophagograms showed a hiatal hernia, shortening and narrowing of the esophagus. This was corrected by replacement of the thoracic portion of the stomach back into the abdominal cavity by displacement of the esophagus anteriorly through a new hiatus and closure of the old hiatus behind the esophagus. By this method, the normal physiologic factors responsible for unidirectional flow were not disturbed. Such a satisfactory correction would not have been feasible, if the disease had been allowed to progress to an irreversible stage of fibrosis and stricture of the lower esophagus.

SUMMARY

Our experience in the study of 24 cases of complicated hiatal hernias is presented. These complications consisted of bleeding, ulceration, stricture and secondary shortening of the esophagus. A hiatal diaphragmatic hernia should be corrected, if symptoms of acute esophagitis have not entirely subsided under a medical regimen after a reasonable length of time.

50 South Munn Avenue

Dietary Gold Rush

Because of "The evergrowing awareness on the part of many people as to the importance of nutrition to general health, today's 'Medicine Man' has an unparalleled opportunity to disseminate his misinformation through books, magazines, lectures and various types of advertising." So write L. A. Bavetta.*

People who never seek competent advice present the most serious aspect in the problem of food fads. "They believe the faddist and his special concoctions will cure them. They continue on a futile and fruitless venture until it may be too late for proper medical or surgical therapy. This is the real tragedy of food faddism."

The "synthetic diet" which has received attention consists of 60 essential nutrients (amino and fatty acids, vitamins, minerals, etc.) found in common foods such as steak, milk, fruits and vegetables. Although these nutrients are known, "we cannot construct such a synthetic mixture from pure compounds in a manner that will produce the same growth promoting effects as preparations made from natural foods. In this respect vitamins are not food; they are useless without substrate of good food. Dietary supplements may not always correct poor dietary practices. The use of multivitamin pills and mineral supplements under certain conditions have real value."

The controversy of whole wheat vs. white bread has also been distorted. "The slight differences that may appear in some animal experiments completely vanish if the bread is not made the sole item of diet but only a minor component. . . . In addition the absorption of nutrients from wheat flour is not as efficient as from products that have less cellulose. There are many digestive tracts that cannot tolerate the extra roughage."

Although one cereal may claim nutritional superiority, "Any differences in the biological value of their proteins is usually obliterated when consumed with the large amounts of milk that man uses for their consumption." And as far as milk itself is concerned, the slight nutritional losses due to pasteurization, which is a prevalent argument for the use of raw milk, "are not severe and are worth the slight cost in nutrients in order to get the extra safety factor from possible infectious diseases."

Although many food faddists are unscrupulous, "the author has known others who are extremely sincere in their beliefs. It is unfortunate that they cannot separate beliefs from scientific evaluation."

*Bavetta, L. A.: Food fads and faddists, American Journal of Digestive Diseases 22:178 (June) 1955.

State Activities • • •

Trustees' Meeting

October 2, 1955

At its October meeting, the Board of Trustees:

—Approved request of Medical Service Administration for authority to pay dentists, chiropodists, optometrists and opticians in cases approved by the Essex County Welfare Board.

—Approved request of Medical-Surgical Plan to authorize them to develop supplemental policies for organizations with many employees in higher income brackets. The Board also directed the President to call a special meeting of the House of Delegates to consider any such proposals, when ready for reporting.

—Urged Medical-Surgical Plan to limit itself to policies which considered the combined income of subscriber and spouse.

—Approved of various *ad interim* actions taken by the President and by the Chairman of the Board since the Annual Meeting. (Details on file in Executive Office).

—Approved of the following nominations: Dr. Luke Mulligan to the State Hospital Advisory Council; Dr. Harrison English to the Epilepsy Project; Dr. Herman Tillis to the N. J. Chapter of the Arthritis and Rheumatism Foundation; Dr. Vincent P. Butler to the Board of Trustees of the New Jersey Safety Council; four named officers of the Society to attend the A.M.A. Clinical Session in Boston in November; Dr. R. W. Betts to attend a short course on medical services in atom bomb emergencies; and

—Authorized its Chairman to name a committee to hear representatives of New York's "Group Health Insurance, Inc." describe their "Family Doctor Plan."

—Approved the following "Principles" with respect to certain specialty services often rendered in hospitals. These services are understood to include anesthesiology, pathology, radiology, and sometimes physiatry and electrocardiography:

(1) The House of Delegates of The Medical Society of New Jersey has adopted a resolution that the Hospital Service Plan shall not cover medical services and the Medical-Surgical Plan shall not cover hospital services.

(2) The Hospital Plan and Medical Plan agree.

(3) Before Medical Plan can consider extending its range of coverage to include the above specialty services, it is necessary for the Plan to know what services now covered by Hospital Plan are hospital services and what services are not hospital services in order to avoid duplication of payment by the subscriber for the same services (whether covered by Hospital Plan and/or Medical Plan).

(4) Once (3) is cleared, it will be necessary to determine whether the subscriber is willing to pay to Medical Plan the premium rate necessary to include such services.

(5) Hospital Plan and Medical Plan must be informed by the Hospital Association and the Medical Society respectively on the differentiation as to what are hospital services in connection with the above specialty services and what are not hospital services.

(6) Medical Plan does not practice medicine. It pays medical bills. Hospital Plan does not render hospital services. It pays hospital bills.

(7) The function of both Plans is to make payment for eligible services covered under their respective contracts.

—Reaffirmed its support of Medical-Surgical Plan policy of not including mandatory consultations as eligible benefits.

—Created a special committee to augment the work of the Advisory Committee of the Woman's Auxiliary, and specified the members and mission of that committee.

—Received the report of the Welfare Committee and took action as follows:

1. Approved the following recommendation:

That the matter of legislation designed to control the corporate practice of medicine be deferred pending further study and report by the Subcommittee on Legislation, by the Subcommittee on Medical Practice, and by study of the so-called Maryland Plan, in conjunction with the radiologists.

2. Concurred in the recommendations of the Subcommittee on Legislation. Thus:

Took no action on S-382, or A-524.
Opposed A-576, A-542, A-536 and A-521.

3. Recommended appointment by the President of a special committee to conduct an in-

vestigation of relations between optometry and medicine.

All the information obtained by the study group will be placed at the disposal of the special committee, and every cooperation will be given by the members of the study group to said special committee to insure full appreciation of the present status of relations between optometry and medicine.

4. Approved further investigation by a special study group of the corporate practice of medicine in so far as it affects radiologists and pathologists who belong to The Medical Society of New Jersey.

5. Approved a basic school health program as follows:

(a) Strip to the waist examination of all children in the 1st, 4th, 8th, and 12th grades.

(b) Screening eye examination at time of each physical examination.

(c) Screening audiometric examination at this time.

(d) Additional health examinations shall be conducted whenever requested by the school nurse, teacher or other school official.

(e) All pupils in competitive sports will be examined each year.

(f) Exceptional children will be examined for proper placement in the school system.

(g) All treatments shall be limited to those of an emergency nature.

(h) Successful vaccination against smallpox and immunization against diphtheria and tetanus *required* before enrollment.

(j) Tuberculin testing will be done in high schools and contacts as indicated.

(k) Pre-employment physical examination of personnel and routinely as required by law.

(l) Facilities for psychometric and psychiatric evaluation should be made available in all school systems.

6. Urged the Commissioner of Health to remove restrictions on the use of poliomyelitis vaccine as early as practicable, and that the program be immediately expanded to include inoculation of 4-year old children if possible.

—Received and approved the audit, and noted the sound financial position of the Society.

—Authorized the President to sign the contract for fee-basis examinations and treatments for the Veterans Administration.

—Appointed an *ad hoc* committee to study a proposal of the Woman's Auxiliary to establish a medical students' loan fund.

—Voted to continue membership in the National Society for Medical Research.

—Heard the following report from the Blood Bank Commission:

1. In view of the over-riding importance of civil defense in all considerations of blood bank organization and integration within the state, it is recommended that the Blood Bank Commission be authorized as the Medical Society's agent to arrange such conferences and consultations with the Director of State Medical and Health Preparedness as will enable the Commission to achieve the following objectives:

a. Integration of blood banks throughout the state along regional lines, preferably about a central bank for each region working in coordination with existing Civil Defense regions or subdivisions.
b. Establishment of standards of blood collection in conformity with those promulgated by the National Institute of Health with a view to eventual approval and licensure by the latter in the interests of expanding potential sources of blood within this state for use in any part of the state or in any part of the country in the event of a major disaster.
c. Exploration of possible provision of material and other assistance from the State Division of Civil Defense to regional blood banks for their local needs and for the recruitment and training of local Civil Defense transfusion teams.

2. The Blood Bank Commission may, from time to time, incur certain expenses for clerical help, telephone calls, etc., to carry on its present functions. Information is, therefore, requested of the Board of Trustees on the budgetary arrangement it should follow in requesting funds for such purposes.

—Authorized expenditures not to exceed $100 for the expenses indicated in paragraph 2 of the Blood Bank report above.

—Approved recommendation 1, paragraphs a, b and c (above) in the report of the Blood Bank Commission.

—Authorized a "get-well" telegram to be sent to Dr. Lewis C. Fritts.

—Received the following opinion of the Judicial Council on the propriety of providing pension plans through special organizations of physicians:

The Judicial Council of The Medical Society of New Jersey has been asked by the Board of Trustees of The Medical Society of New Jersey to render an opinion "regarding the ethics and legality of New Jersey doctors forming unincorporated associations to practice medicine, with membership being limited to practicing physicians, and providing a pension plan for members giving all the advantages that corporation employees have under an approved pension plan."

The Council points out that questions of legality are not proper to its jurisdiction, and that opinions concerning legality should be referred to legal counsel. However, it is the first of the Council's enumerated duties "to interpret and rule upon all questions of an ethical nature that shall confront the House of Delegates or any other board or commit-

tee of the Society." (By-laws: Chapter VII, Section 4)

It is the opinion of the Judicial Council that if New Jersey doctors, members of The Medical Society of New Jersey, form unincorporated associations to practice medicine, with membership being limited to practicing physicians, and providing a pension plan for members giving all the advantages that corporation employees have under an approved pension plan, they do not in any way violate the *Principles of Medical Ethics of the American Medical Association,* which principles govern the conduct of the members of The Medical Society of New Jersey in their relations to each other and to the public, provided that nothing is done contrary to the stipulations of Chapter I, Section 3 of the *Principles of Medical Ethics of the American Medical Association* dealing with Groups and Clinics—which follows:

The ethical principles actuating and governing a group or clinic are exactly the same as those applicable to the individual. As a group or clinic is composed of individual physicians, each of whom, whether employer, employee or partner, is subject to the principles of ethics herein elaborated. the uniting into a business or professional organization does not relieve them either individually or as a group from the obligation they assume when entering the profession.

Changes in Syphilis Testing Program

Beginning January 1, 1956, the State Laboratories, Bureau of Serology, will discontinue the Mazzini (lipoidal) flocculation test as a screening test for syphilis. In its place, the V.D.R.L. (Venereal Disease Research Laboratory) test will be adopted as a routine screening test. All reactive sera with this test will be tested with a complement fixation test. (Kolmer).

Also beginning on January 1, a new terminology will be used in reporting syphilis serologic tests. This terminology has been recommended by the National Serologic Advisory Council to the Surgeon General of the U. S. Public Health Service. It has been adopted by the Venereal Disease Research Laboratory and many State and private laboratories. The new system is designed "to provide uniformity of reporting and to avoid diagnostic connotations."

The following changes will be adopted after January 1, 1956:

Old Terms	*Terms Now Used*
Positive (P)	Reactive (R)
Doubtful (D)	Weakly Reactive (WR)
Weakly Positive (WP)	Weakly Reactive (WR)
Negative (N or -)	Nonreactive (N)

E. L. SHAFFER, Ph.D.,
Director of Laboratories

Salk Vaccine Eligibility Widened

Regulation One of our State Health Department's Poliomyelitis Vaccine Regulations has now been amended to permit use of poliomyelitis vaccine for all children below the age of 15 and pregnant women.

Regulation 1 of the Poliomyelitis Vaccine Regulations as promulgated on October 13, 1955 provides:

"1. Until such time as poliomyelitis vaccine now in short supply may be available in larger quantities, no person shall buy, sell, offer to sell, distribute, or use vaccine except for inoculation of children below the age of fifteen years and pregnant women."

A high incidence of poliomyelitis in Massachusetts in 1955 tested the vaccine to a degree not experienced elsewhere. The results in the table below indicate dramatically the effectiveness of the Salk vaccine:

Size and Type of Group	Reported Polio Cases	Rate per 100,000
285,000 children, unvaccinated	429	150
150,000 children, 1 inoculation	43	28
24,000 children, 2 inoculations	2	8

Unvaccinated children in Massachusetts had more than 18 times as many reported cases of poliomyelitis, in proportion to numbers, as occurred among children who had two inoculations.

Three inoculations will provide even stronger protection than two. If children are to have maximum protection against paralytic poliomyelitis before the 1956 polio season in New Jersey, it is imperative that parents seek this protection for their children now. The time table of three inoculations calls for an eight-month spread. The second inoculation ought to be given one month after the first and the third seven months after the second.

The American Academy of Pediatrics recently endorsed the administration of Salk poliomyelitis vaccine. The policy of making it available had been consistently maintained by The Medical Society of New Jersey.

In most instances, the parent will seek the services of his family physician to have his child inoculated. If the parent advises the doctor that he cannot afford to pay for the vaccine, the physician may use vaccine obtained without cost from one of the biological distribution stations of the State Department of Health. When the doctor secures the vaccine, he does not identify the child or the family. The physician, in his discretion, may also adjust his medical service fee—as distinct from the vaccine itself for which there will be no charge under the cited circumstances.

Most of the immunization of children in New Jersey—against smallpox, diphtheria, whooping cough, tetanus, etc.—is done by the family physician. The State for many years has provided the immunizing material to be used by the physician, upon his request, for those who cannot afford to pay for it. In this manner, the patient-physician relationship is maintained, and, at the same time, provision is made, on a confidential basis, for those who cannot afford to pay for the immunizing material. No child need be denied the opportunity to receive vaccine because the parent or guardian cannot afford to pay for it.

Cities and towns may set up municipal clinics. The Federal Government through the State Department of Health provides the vaccine used in such clinics. Where such clinics are set up, there is to be no means test. The only restriction is that the child must be below 15 years. Where such clinics are set up, the administrator will try to avoid duplicating the first and second shots of those children who received them under the program of the National Foundation for Infantile Paralysis.

Book Reviews • • •

Many of the reviews in this section are prepared in cooperation with the Academy of Medicine of New Jersey.

Neuro-Surgery in General Practice. By Adrian Ver Brugghen, M. B., M. S. Pp. 665. Springfield, Illinois, Charles C. Thomas, 1952.

This book was written at least ten years too late. Its purpose is to help the general practitioner with his neurosurgic problems. Prior to the widespread training of neurologic surgeons, it was necessary for the general practitioner to have a working knowledge of the diagnostic problems of neurologic surgery so that he could handle some of the urgent problems and then arrange for transfer of the patient to a neurosurgic center. However, now that there are well trained neurosurgeons, well distributed throughout the country, it is unnecessary for the busy general practitioner to have at his command the information available in this 600 page book devoted to neurologic surgery.

The material presented is clear, well documented and readable. It is as concise a presentation of the major problems of neurologic surgery as one could hope to obtain. Each of the major conditions confronting the neurologic surgeon is studied in a logical format. The practical diagnostic features and the differential diagnosis are thoroughly discussed and the proper treatment is outlined.

Unfortunately, this book is not detailed enough for a reference work for the neurosurgeon nor are the technical procedures described in great enough detail to be of value to the neurosurgeon. The greatest value of the book now would be to the medical student who might be stimulated to appreciate the problems of the neurosurgeon.

HAROLD M. SOMBERG, M.D.

Announcements • • •

Cardiology Fellowship Available

St. Michael's Hospital, Newark, will have available, beginning July 1, 1956, two clinical trainee Fellowships in cardiology. These Fellowships are recognized by the National Heart Institute and are credited toward one year of residency in internal medicine. To qualify, an applicant must have completed two years of an approved residency in internal medicine. All those interested should communicate promptly with N. A. Antonius, M.D., Director, Department of Cardiology, St. Michael's Hospital, Newark, New Jersey.

Proctology Award

The International Academy of Proctology announces its cash prize and contest for 1956. The best unpublished contribution on proctology or allied subjects will be awarded $100 and a Certificate of Merit. Certificates will be awarded also to physicians whose entries are of unusual merit.

Entries are limited to 5,000 words, must be submitted in five copies. Entries must be received by January 31, 1956. Entries should be addressed to the International Academy of Proctology, 147-41 Sanford Avenue, Flushing, New York.

Graduate Courses in New York

Mt. Sinai Hospital, New York City, in affiliation with Columbia University, announces a roster of unusual courses for the term beginning in 1956.

Part-time courses, and their starting dates are:

Heart disease, Feb. 14.
Hematology, Feb. 27.
Gastro-intestinal roentgenology, March 6.
Chest roentgenology, March 19.
Blood banks, April 3.

These courses are focussed on the needs of the general practitioner. Also, general practitioner-oriented, are the following full-time (intensive) courses:

Electrocardiography, Jan. 23 to 28.
Cardiovascular diseases, Jan. 30 to Feb. 10.
Proctology, Feb. 20 and 21.
Neurology, April 2 to 6.
Gastro-enterology, April 16 to 20.

For specialists, Mt. Sinai announces courses in laryngoscopy (Feb. 13 and 14); newer developments in obstetrics (March 5 to 25); radio-active isotopes (June 4 to 29); modern gynecology, (March 5 to 25); speech therapy (Feb. 15 and 16); rhinoplasty (July 14 to 21); audiology, (Feb. 17 and 18); radium therapy (April 24 to June 5) and otoplasty (July 14 to 28).

For details write to Postgraduate Registrar, Mt. Sinai Hospital, 1 East 100 Street, New York 29, N. Y.

Florida on a Clear Conscience

Florida's Annual University seminar in ophthalmology and otolaryngology will be held at the Sans Souci Hotel, Miami Beach the week of January 16, 1956. Ophthalmology will be presented on January 16, 17 and 18; Otolaryngology on January 19, 20 and 21. A midweek feature will be the convention of the Florida Society of Ophthalmology and Otolaryngology on Wednesday afternoon, January 18, to which all registrants are invited. The schedule has been changed to provide a maximum time for recreation each afternoon.

Lecturers on ophthalmology this year are: Dr. Francis H. Adler, Philadelphia; Dr. A. Gerard DeVoe, New York; Dr. Michael J. Hogan, San Francisco; Dr. C. Wilbur Rucker, Rochester, Minnesota; and Dr. A. D. Ruedmann, Detroit, Michigan. Those lecturing on otolaryngology are: Dr. Frederick A. Figi, Rochester, Minnesota; Dr. Lewis F. Morrison, San Francisco; Dr. Charles E. Kinney, Cleveland; Dr. John R. Lindsay, Chicago; and Dr. Bernard J. McMahon, St. Louis.

Authors' Clinic • • •

Don't Try to Exhaust the Literature . . . or the Reader

An extensive bibliography may be prepared with the hope of exhausting the literature. It won't. But it may well exhaust the reader. No reader wants to be heckled by dozens of small-print footnotes and references. The author pads his manuscripts with references because he hopes to conjure the image of himself sitting up all night in a library poring over *Index Medicus*. This is intended to impress the editor and reader with the author's scholarliness. It doesn't. It bores the editor and frightens the reader.

Doctors tend to over-document just as they tend to over-illustrate. If you write that "blood spitting is a common symptom in tuberculosis" you really do not have to footnote that to Hippocrates, Vesalius and Sir William Osler. You *do* have to cite references:

(a) To avoid the charge of plagiarism. When you refer to the words, the opinions, the experiments, or the results of another worker, you cite him.

(b) To give credit where it is due. If Zilch was the first observer in history to report success in the treatment of dandruff by the use of Siberian musk, then, if you make any reference to this exciting discovery, you must cite Zilch.

(c) To document statements that might otherwise be doubted.

(d) To give the serious student some citations which will launch him on a more detailed review of the subject.

But that's all. Do not cite references which simply reconfirm what is already established. If your search shows sixteen observers, all of whom agreed that 5 grains was the effective dose of viburnum, it would be absurd to write that:

Jones,[2] Smith,[3] Williams,[4] Brown[5] . . . and Johnson[18] report that the effective dose of viburnum is five grains.

But, absurd or not, I can name authors who have done just that.

Last month this column told you how you type the key numbers, arrange the references and spell out the citations. Also, in an earlier column, I reviewed with you the problems presented by citing foreign periodicals, abstracts, books, unpublished essays, personal communications and multiple sources. Here, I just want to say something about tracking down the literature.

When you start a manuscript, you want to ascertain what has been said or done about the subject before. You might think that your case of triple ampulla of Vater is exquisitely rare. But who knows? Maybe if you pored over the literature you would find a hundred cases reported. If you want to correlate results with various methods of treatment, you strengthen your conclusions if you can collate cases treated this way by earlier authors. Not all manuscripts need citations. A philosophical essay may not need a single reference. An inaugural address, a commencement oration, a book review, an editorial, a letter-to-the-editor, a discussion of someone else's paper; these writings may need no footnotes.

The ordinary scientific article, however, usually does require some citations. After all, whatever view you have of the medical horizon, is made possible because you are standing on the shoulders of your predecessors.* Once in a blue moon a medical author creates something completely new, all out of his own head. Something with no past at all. And in that rare situation, the article may be devoid of references. But generally, you started from somewhere. And that "somewhere" must be cited.

How do you start searching the literature? Here are your tools:

1. Index Medicus.
2. Catalogue of The Surgeon General's library.
3. Indexes of standard medical journals.
4. Year books and reviews.
5. Library borrowings.

Index Medicus. "The Quarterly Cumulative Index Medicus" is published periodically by the American Medical Association. As a practical matter, this is the best all-around citation tool available. Everything is in a single alphabetical index by author, by title, by subject. It lists practically everything published

*To avoid the charge of plagiarism, I should, at this point, cite the author who first used this picturesque phrase about "standing on the shoulders of our predecessors." I think it ran something like this: "If I see so far, it is because I am standing on the shoulders of giants." But I have searched Hoyt, Mencken and Bartlett in vain. I cannot find the original phrase. Sorry—H.A.D.

that half-year in any serious medical periodical anywhere in the accessible medical world. If you want to find out what is known of suppurative pericarditis in newborn infants, you can track it down if you have the patience to go through enough issues of *Index Medicus*. Look in each issue under "pericarditis, suppurative." You will see *Index Medicus* shelved in the library of any medical school; in libraries of large hospitals; in libraries attached to large medical societies and academies of medicine. Many large city libraries carry *Index Medicus* too. It takes two volumes to cover a calendar year. If you want to find everything written on agrypnia during the past twenty years, you have to look through 40 of these books. Actually, it isn't as dreary a job as it sounds. In most cases you will find that some author, a few years ago, *has* culled the entire literature. So you can start with him. Be sure to give him credit for that though.

That works this way: you are interested, say, in treatment of athlete's foot by toe disarticulation. You find that Schmalz in 1949 reviewed the entire literature on this, and summarized what was known. So all you have to do is check all references after 1949. In discussing what happened in this field *before* 1949, you make free use of Schmalz's analysis—but you credit him, thus:

> Fliegenheimer (cited by Schmalz [2]) was the first to suggest disarticulation as the treatment for athlete's foot. This was in 1882. The following year, Stinkelfritz (cited by Schmalz [2]) reported on two cases successfully treated by this technic. Not until 1905, was any protest made about the radicalness of the procedure. This protest was made by Bratella (cited by Schmalz [2]) who . . .

You could, of course, just copy the original citations from the Schmalz article, and make it look as if you, yourself, did all that research. But this is not sporting.

After you have collected the citations in *Index Medicus*, the next step is to find the original articles. Suppose you see (in the *Index*) that Cabellero in 1951 had a case like yours reported in the Peruvian Annals of Plastic Surgery. If you have no access to the Peruvian Annals of Plastic Surgery, this information does you no good. You might write to the author for a reprint if you can find his address. If you are near a big city, the chances are that copies of all standard medical journals are shelved in the library of a medical school, hospital, medical society or academy in that city. Call up and make sure. They might happen to have the Peruvian Annals of Plastic Surgery. They will certainly have the more usual English language journals.

If you do not have access to that periodical write to the Librarian of The Surgeon General's Office, Department of the Army, Washington 25, D.C. Or to the Librarian, American Medical Association in Chicago. See if they will lend you or rent you that issue. Or they may have it on microfilm. Or ask your own city librarian or hospital librarian about an inter-library loan. You'd be surprised how swifty you can get an obscure journal or book through an inter-library loan.

2. *Catalog of The Surgeon General's Library*. In theory, this is the most complete medical index in the world. Everything gets indexed here. However, it grinds out its books so slowly that it is always some years behind. Clinicians rarely use it unless they do not need up-to-date references and do want a 100 per cent exhaustive index. Write to the Librarian, The Surgeon General, Department of the Army, (Washington 25, D.C.) for more details.

3. *Indexes of Standard Medical Journals*. Almost every subject belongs to some specialty. And that specialty has several medical journals devoted to it. So, if you run down the indexes in the annual issues of the leading specialty periodicals, you will find the matter pretty well covered. For example, any significant material on heart disease would, in all likelihood, appear in original article or in abstract in one of these:

American Heart Journal
American Journal of the Medical Sciences
Annals of Internal Medicine
Archives of Internal Medicine
Blood
Journal of the American Medical Association
Journal of Laboratory and Clinical Medicine

You may have access to these seven journals, perhaps in the libraries of friends or fellow-practitioners. Look in the index each year (usually one, sometimes two index numbers a year) and see if the topic is mentioned. Since these periodicals index abstracts as well as original articles, the chances are that anything of importance in cardiology will have been picked up by the far-flung net which these journals cast. To put it another way: any cardiology study not picked up, even in abstract, by one of these seven journals, is probably not a major or serious production.

Of course, you can extend that list. For instance, many practical papers on heart disease appear in state medical journals, hospital periodicals, and the bulletins of local medical societies and academies. Do you want to cull them? Many basic articles appear in journals of pathology, physiology and experimental

medicine. Will you want to check them? Transactions and proceedings of conventions may be gold-mines of up-to-date data. And there is the whole foreign literature — particularly British and Canadian. You have to draw the line somewhere, however. If you do not have access to *Index Medicus*, analyses of every index of these seven journals running as far back as you please, will—in all likelihood—pick up any significant article in the field written during the period covered. You can prepare a journal list like this for any specialty.

4. *Year Books and Reviews.* Each year, usually in the spring, there appear for each specialty, a number of volumes which summarize the previous year's literature. These are known as "Year Book of . . .;" or "Review of . . ." or "Progress in . . ." There is also, for several specialties, a "Quarterly Review . . ." A local medical librarian or local specialist can probably put you on the trail of these excellent publications. These books do not pretend to be exhaustive. But it is hard to believe that any really significant work could have been missed by all these publications. Ask your friends in the specialty. One will have a fairly complete set of "Year Books," and another will have most of the last "Progress in . . ." volumes. By checking *their* indexes you can get reasonably good coverage of the subject.

5. *The A.M.A. Package Library Service.* The library of the American Medical Association has collected published material in the form of reprints, pages from periodicals and pamphlets on many phases of medicine and surgery. The collection is limited to current literature and does not contain articles in foreign languages. From this file each package is compiled, and includes fourteen to sixteen items, four of which may be periodicals. In an emergency a borrower may specify that his request be specially handled and his package sent first class, air mail or special delivery, but in this case the borrower pays for the mailing charges. No photoduplication services are available.

Only members of the Association and subscribers to its scientific periodicals are eligible for this service.

Requests for packages must be addressed "Library, American Medical Association, 535 N. Dearborn St., Chicago 10, Ill."

No charge is made to members of the Association, but the fee for other borrowers[1] is fifty cents in stamps.

Packages may be kept for 10 days. When returning package, tear off mailing slip enclosed and paste on wrapper.

6. *Journal Lending Service.* The American Medical Association will also lend you medical journals—not just A.M.A. publications but any available medical magazine. This is limited to journals published in and after 1946. No microfilm or photoduplication facilities are available in this service. If you belong to the A.M.A. this is a free service. If you subscribe to an A.M.A. periodical but do not pay A.M.A. dues, then you have to pay 15 cents an item. You are limited to three journals at once and may keep them up to five days. Write to the A.M.A. Library (535 N. Dearborn St., Chicago) for this service.

7. *Inter-library Loan Services.* Go to your nearest general library—city or county—and ask about the inter-library loan service. With some exceptions, practically any journal or book in print is yours for the asking through the wonderful network of city, state and county libraries. These are loans, and there may be a small fee. Don't be bothered by the fact that you never see medical journals on the shelves of general libraries. Give them a chance.

That, in brief, is how you assemble the printed literature. In addition, you might remember to check with local hospitals about cases in their diagnostic files. Suppose, for example, you are doing a paper on actinomycosis of the vulva. In addition to reviewing the printed literature, as suggested above, you might also go to the largest local hospitals. Stop in the record room. Ask if they have a diagnostic file. Tell them to check actinomycosis of the vulva. You'll hear them mumbling 774-202, but don't worry about it. It's the code to their diagnostic file. They will produce a number of cases, cross-indexed by complications, outcome, age and so on. With permission of the attending physician, you might be given access to the original charts and thus enrich your paper by some unique references. (You cite these by naming the hospital, and thanking the attending physician. Do *not* give the initials or hospital numbers of the patients, however, since this makes them too easily identifiable.)

HENRY A. DAVIDSON, M.D., Editor

1. That is, non-member subscribers to the A.M.A. publications.

County Society Reports • • •

Atlantic

A regular meeting of the *Atlantic County Medical Society* was held at the Children's Seashore House, May 13, 1955. The president, Dr. Matthew Molitch, presided.

The scientific lecture was by Harry H. Brunt, Jr., M.D., Medical Director of the State Hospital at Ancora. Dr. Brunt presented a very clear picture of the new hospital which is to have a capacity of 2,518 patients and will employ 745 persons. Cost of the buildings is $21,000,000 and the yearly budget will be $3,500,000. The institution will include all modern facilities. There were questions concerning the cost and the availability of accommodations for patients in the South Jersey area. After hearing Dr. Brunt we are sure the hospital is in capable hands.

The final business meeting of the fiscal year was opened with committee reports. Dr. James Gleason reviewed the activities of the Insurance Committee. Dr. Samuel Diskan for the Public Relations Committee, read the "Suggested Guide for the Release of Medical Information to Press, Radio and Television." He moved, and it was seconded and passed, that the Code be adopted.

Dr. Walter Stewart reported the work of the Library Committee continued throughout the year. On his motion, $300 was appropriated for the Library.

Dr. Merendino recommended Dr. Howard D. Cohen for associate membership, Dr. Irving Braverman for elevation from associate to regular membership, and Dr. Richard Lavin for regular membership by transfer. The Society voted unanimously in approval. Application of Adolph Koch, a psychologist, for courtesy membership was tabled.

Dr. John Holland reported for Dr. Jay Mishler. The report was made on cash income and expenditures, and was audited and approved by Dr. Naame and Dr. Weintrob. It was approved as read. The Society approved the motion giving Dr. Holland the authority to sign checks as temporary treasurer.

Dr. Timberlake moved that the Society allot $75 for a trophy to be awarded at the A.M.A. Golf Tournament from the Atlantic County Medical Society. The motion was passed. The Society also endorsed the chest x-ray program sponsored by the Visiting Nurse and Tuberculosis Society.

The following were elected to office: President, Dr. Peter H. Marvel; Vice-President, Dr. Baxter H. Timberlake; Secretary, Dr. J. C. McCracken, Jr.; Treasurer, Dr. Jay E. Mishler; Reporter, Dr. Leonard B. Erber; Historian, Dr. Walter B. Stewart.

Three delegates to the State Society and three alternates, term expiring 1958, and a fourth delegate in case our county membership is such that ten delegates are needed, were elected:

Delegates—Dr. Robert A. Bradley, Dr. David B. Allman, Dr. Clifford K. Murray, Dr. H. Donald Marshall.

Alternates—Dr. Belford A. Weeks, Dr. Morton Major, Dr. Ralph E. Ruppert, Dr. Frank B. Doggett, Jr.

Dr. Molitch thanked all the officers, chairmen of committees, and other members who were so important in making 1954-55 such a successful year. The president also thanked Dr. Vandegrift for having the meetings at the Children's Seashore House, and he authorized a letter of appreciation to the Trustees of the Seashore House. Dr. Vandegrift invited the Society to return during 1955-56.

Dr. Diskan presented Dr. Molitch a gold medal in appreciation of his fine work as president of the Society.

There being no further business, the meeting was adjourned. Refreshments were supplied by the Bulletin.

LEONARD B. ERBER, M.D.
Reporter

Hudson

Hudson County Medical Society initiated its 1955-6 season on October 4, 1955, when the first meeting took place at Jersey City Medical Center. Dr. Sigmund C. Braunstein of West New York presided.

Among the committee chairmen who reported, was Dr. A. C. Ruoff, chairman of the Insurance Committee, who discussed the present status of malpractice insurance.

Elected to active membership were Dr. Jerome A. Dolan and Dr. Frederick E. G. Valergakis, both of Jersey City.

Dr. Braunstein spoke on the importance of the Society's Emergency and Night Service Program and urged that all doctors serving on this panel observe with the greatest care the rules governing the successful operation of the program.

The secretary was directed to write Dr. Bergsma asking an amendment of the poliomyelitis vaccine regulations to permit inoculation of all children below the age of 15.

Guest speaker was Dr. Arthur M. Fishberg, Director of Medicine at Beth Israel Hospital, New York City, who spoke on the "Present Status of Therapy of Hypertension." Drs. Bedrick, Bortone, Chanin, Dolganos, Irving, Kimmel, Landshof, Rubenstein, Schneider, and Sirken participated in a discussion from the floor.

CHARLES A. LANDSHOF, M.D.
Reporter

Middlesex

The regular monthly meeting of the *Middlesex County Medical Society* at Roosevelt Hospital, Metuchen, was called to order by the president, Dr. Joseph F. Sandella. Minutes of the June meeting were approved as read.

A report of the Medical Ethics Committee by Dr. B. F. Slobodien, Chairman, indicated that he is in receipt of an application for membership, which was not signed by two sponsors as required; hence would be returned to applicant. The question was brought up whether associate members are actually required to be residents of the state and in practice. Dr. Sandella stated the applicant must be registered in the county but not necessarily in practice. It was deemed advisable to refer the matter to the Board of Trustees, making practice and residence in the county mandatory. A question was raised regarding wording: hence "gainfully employed" would be the wording rather than "practice."

Dr. Reitman announced the November program would be in conjunction with the New Jersey Pharmaceutical Association at Oak Hills Manor. Dr. Reitman moved that, in view of the joint meeting, expenses should be shared. It was seconded and passed.

Among the communications read were letters from Mrs. Runyon and Dr. McKiernan thanking the members of the Society for their recent thoughtfulness.

The speaker of the evening was Dr. Simon Dack, cardiologist at Mount Sinai Hospital at New York, who spoke on "Recent Advances in Management of Coronary Artery Disease." Dr. Dack discussed the vaso-pressor drugs; shock and its management, heart failure, the arrhythmias, and anti-coagulant therapy. The premonitory or prodromal phase of the disease was also touched upon. Angina pectoris and its management including the use of radioactive iodine and surgery, rounded out the various phases of management. A stimulating discussion followed with a period of questions and answers both wise and otherwise.

A request from the United Fund for County Medical Society contribution was tabled. The National Foundation for Infantile Paralysis requested that a Committee be formed to work with the Foundation. The request was put in the form of a motion by Dr. B. F. Slobodien. A request from the Health Department for a Committee to work on air pollution was referred to the Health and Welfare Committee.

ALFRED J. BARBANO, M.D.
Reporter

Monmouth

The Sixth Annual Summer Dinner-Dance conducted jointly by the *Monmouth County Medical Society* and its Woman's Auxiliary was held at the Deal Golf and Country Club on September 10, 1955. The affair was under the co-chairmanship of Dr. and Mrs. Donald W. Bowne. After a buffet dinner, dancing to the music of Pete Galatro's Orchestra was enjoyed by 200 members and their guests.

The regular monthly meeting of the Society was held on September 28 at Monmouth Memorial Hospital, Long Branch, with Dr. John Hardy, president-elect, presiding. Guest speaker was Dr. Stuart M. Finch, Associate Professor of Psychiatry at Temple University School of Medicine. His subject was "Psychosomatic Disorders of Children."

The following were elected to active membership: Drs. George F. Cowling, Keyport; Pascal L. Federici, Long Branch; Lorenzo W. Harris and Collins H. Robinson, Asbury Park; Emanuel Abraham, Asbury Park (transfer from Essex County); George H. Burke, Asbury Park (transfer from Ohio); Edward J. Salmeri, Little Silver (transfer from Michigan); and Daniel McCoy Winters, Red Bank (transfer from New York).

Associate membership was granted to Drs. Herbert W. Engel, Long Branch; Donald S. Littman, Little Silver; Gordon R. Smith, New Shrewsbury.

DONALD W. BOWNE, M.D.
Reporter

Salem

Our speaker, Dr. Howard Israel, spoke on "Pulmonary Embolism," after Dr. Eugene Pashuck called the regular meeting to order on October 21, 1955.

During the business meeting Dr. Charles B. Norton said that he feels that we cannot adequately discuss revision of the constitution in less than one hour. A motion carried that the discussion be tabled.

The Society approved Dr. D. A. McLean's appointment as "Baby-Keep-Well" Station Physician in Alloway, N. J.

Dr. Charles B. Norton's Polio Vaccine Committee reported as follows:

1. They favor an "appropriate local authority" to pass on worthiness of needy applicants for the vaccine. The applicants would then take the vaccine to their own physician for administration. As alternate, the system could be set up and held in readiness.

2. Committee felt that $4.00 per injection is fair fee.

3. We should encourage parents to bring in their children.

Mr. Howard Morris (County Superintendent of Schools) has approved that a letter be sent through the schools.

Dr. Harry F. Suter moved that Dr. Norton set up program as suggested by his committee and prepare publicity.

Society members were invited to participate in a panel discussion with the county P.T.A.

County dues were raised from $10.00 to $15.00 per year.

The Woman's Auxiliary wants a biographic list of each member's life history.

CHARLES E. GILPATRICK, M.D.
Reporter

THE JOURNAL

OF

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Index 1955

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Journal founded September 1, 1904

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HOW TO USE THIS INDEX

This is a single alphabetical index. When searching for an original article, look under the first significant word in the title. Authors are also listed alphabetically, with an asterisk (*) to indicate if reference is to an original article. Editorials are indexed by first significant word of title or by subject; book reviews by title or subject but not by author. City of residence is indicated for authors of original articles.

If you do not bind your JOURNALS, use the table of pages (below) to find the month of issue to which any page citation refers.

The Transactions of the Annual Meeting appear as a supplement to the September issue.

The annual reports of the committees and officers of the Society are indexed on page 185 of the April JOURNAL.

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br—Book Review
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TUBERCULOSIS *Abstracts*

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Pulmonary Coin Lesion

By John F. Higginson, M.D., and David B. Hinshaw, M.D., Journal of the American Medical Association, April 30, 1955.

The problem of the asymptomatic solitary, coin-shaped, pulmonary lesion was first fully presented in 1948, by O'Brien and others, who studied 21 patients in whom coin-shaped pulmonary roentgenographic shadows were seen on routine or survey chest roentgenograms. In all instances an exact diagnosis was impossible by clinical methods. The possibly serious nature of the lesions indicated an exploratory thoracotomy in order to establish a histological diagnosis. Eight, or 38%, of the 21 patients had bronchogenic carcinoma, and the others had tuberculomas or other nonmalignant lesions. The conclusion of this study was that all such solitary, benign-appearing, pulmonary lesions should be treated by exploratory thoracotomy rather than prolonged observation. Similar studies by other investigators show considerable differences in the selection of cases and in the types of lesions found at surgery. The percentage of malignant tumors (including bronchogenic carcinoma, lymphoma, metastatic carcinoma, and various types of sarcoma) that have been found has varied from 15 to 55%. The percentage of bronchogenic carcinoma only has ranged from 4.6% to 49%. The other common entities found have been tuberculomas and hamartomas.

Different authors have used varied criteria for selecting patients; however, all have agreed that the pulmonary shadows in question must be solitary, essentially asymptomatic, and reasonably circumscribed. It has also been agreed that the lesions must be in the lung parenchyma and must be inaccessible to biopsy except by exploratory thoracotomy. There are differing opinions on the inclusion of cavitating lesions and calcific lesions. However, the lack of agreement regarding the size of the lesion has been most apparent. Some authors have specified that the roentgenographic shadows found in their patients should not exceed 4 cm. but it is apparent from the published roentgenograms that many much greater in diameter have been included. The term "coin" implies definitely small, solitary lesions. In view of the differences in criteria of selection, different reports on the incidence of solitary pulmonary shadows, subsequently proved to be malignant tumors, are not surprising.

It is our purpose to emphasize the problem of the small, solitary, pulmonary lesion commonly referred to as a "coin lesion" with regard to case selection and to present a study in the evaluation of the many benign-appearing pulmonary lesions of this type being found in chest surveys. This has seemed especially important because of the common and persistent connotation of benignancy associated with the use of the term "coin lesion."

The patients in this study were all seen by the thoracic surgeon after a solitary isolated, round or oval (coin-shaped), asymptomatic pulmonary shadow was found either on a routine chest roentgenogram or on a chest survey roentgenogram for tuberculosis. Exploratory thoracotomy was performed in each case. The following criteria for selecting the cases were carefully observed. 1. Only

a solitary lesion was noted on the roentgenogram of the chest. 2. There was no evidence of attachment of the lesion to the chest wall. 3. The lesion was located in the lung parenchyma and was surrounded by aerated lung tissue. 4. There was no cavitation. Cavitation in any unidentified pulmonary lesion is simply another indication for surgical exploration. 5. The lesion was well circumscribed. 6. No adjacent pulmonary infiltration was noted. 7. No lesion was more than 4 cm. in diameter. If larger lesions were included, the series would be much greater; however, larger lesions are automatically considered to demand exploration. Difficulties and dangers arise in the procrastination that occurs with smaller, or coin-sized lesions. The 4 cm. limitation proposed earlier agreed with our experience. 8. There were no symptoms that in themselves encouraged surgical exploration. 9. It was not possible to establish a histological diagnosis by bronchoscopy or by other means.

It is not feasible to give a detailed presentation of all 39 cases included in this study. In all instances the patients had many sputum studies, including cultures for Mycobacterium tuberculosis, tuberculin and coccidioidin skin tests, multiple chest roentgenograms, and bronchoscopy. The preoperative diagnosis in all cases was pulmonary coin lesion of an undetermined nature. There was no surgical mortality, and the surgical morbidity was low. Twenty-eight were in the Veterans Administration Hospital, Portland, Oregon and 11 were private patients.

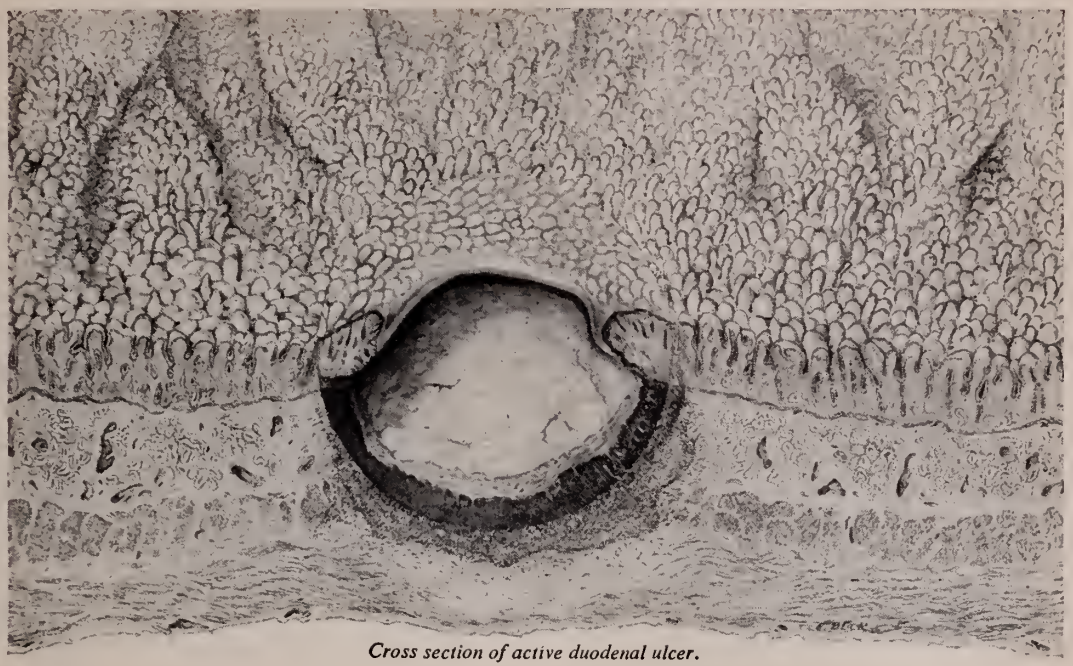
The incidence of bronchogenic carcinoma in this series was 10.3%, which is higher than the 4.6% recorded in another study. The latter series, however, was drawn largely from a relatively young age group. It would seem that the older the patients, the higher the incidence of bronchogenic carcinoma.

One case of solitary melanoma of the lung was included in this series; no extrapulmonary primary source of this was found. With the inclusion of this case, the cases of patients with alveolar cell carcinoma and bronchogenic carcinoma, the incidence of malignant coin lesions becomes 15.3% of the total. It appears that the frequency of bronchogenic carcinoma in small circumscribed, pulmonary (coin) lesions is nearer to 10.3% than to some of the much higher percentages that have been reported. The high incidence of coccidioidal granulomas probably reflects the fact that many of the patients have lived near areas where this disease is endemic.

The wisdom of surgical exploration and histological identification of these solitary, benign-appearing, coin lesions is evident. The possibility of primary bronchogenic carcinoma being present is sufficient justification for exploration. Until recently physicians usually observed these patients with a presumptive clinical diagnosis of tuberculoma or benign neoplasm for a long time and, unfortunately, some physicians still do. The danger of this is obvious. The roentgenographic appearance of the lesion or any combination of clinical and laboratory tests will not show what the histological nature or bacteriological threat may be in an individual patient. A coin lesion in the lung should be considered as one considers a small lump in the breast, i.e., as malignant until proved otherwise.

It is generally accepted that the proper treatment for a known tuberculoma is removal by surgery. It has been shown that many so-called tuberculomas contain viable tubercle bacilli. These tuberculomas can and do caseate, cavitate, and produce widespread pulmonary disease. Some authorities believe that approximately 25% of the untreated tuberculomas "break down." Of the lesions in this study, 31% proved to be tuberculomas. We believe that the presence of calcium in a coin lesion should not defer surgical exploration unless the patient is a poor surgical candidate with systemic disease or unless the lesion is less than 1.5 cm. in diameter and is solidly calcified. After the surgeon is satisfied as to the histopathological diagnosis, he may then perform whatever definitive surgical treatment is indicated. In view of the many chest roentgenogram surveys that are being conducted throughout the United States, it is important that all physicians be made aware of this problem in order that they may properly advise the patients referred to them from the survey centers.

Results in a series of 39 cases of solitary, parenchymal, so-called pulmonary coin lesions show that a significant number of these lesions are malignant neoplasms or tuberculomas and should, for this reason alone, be treated by exploratory thoracotomy and identification rather than by a period of observation. Prompt surgical attack on the so-called pulmonary coin lesions affords one of the best opportunities for early discovery and early treatment of bronchogenic carcinoma.



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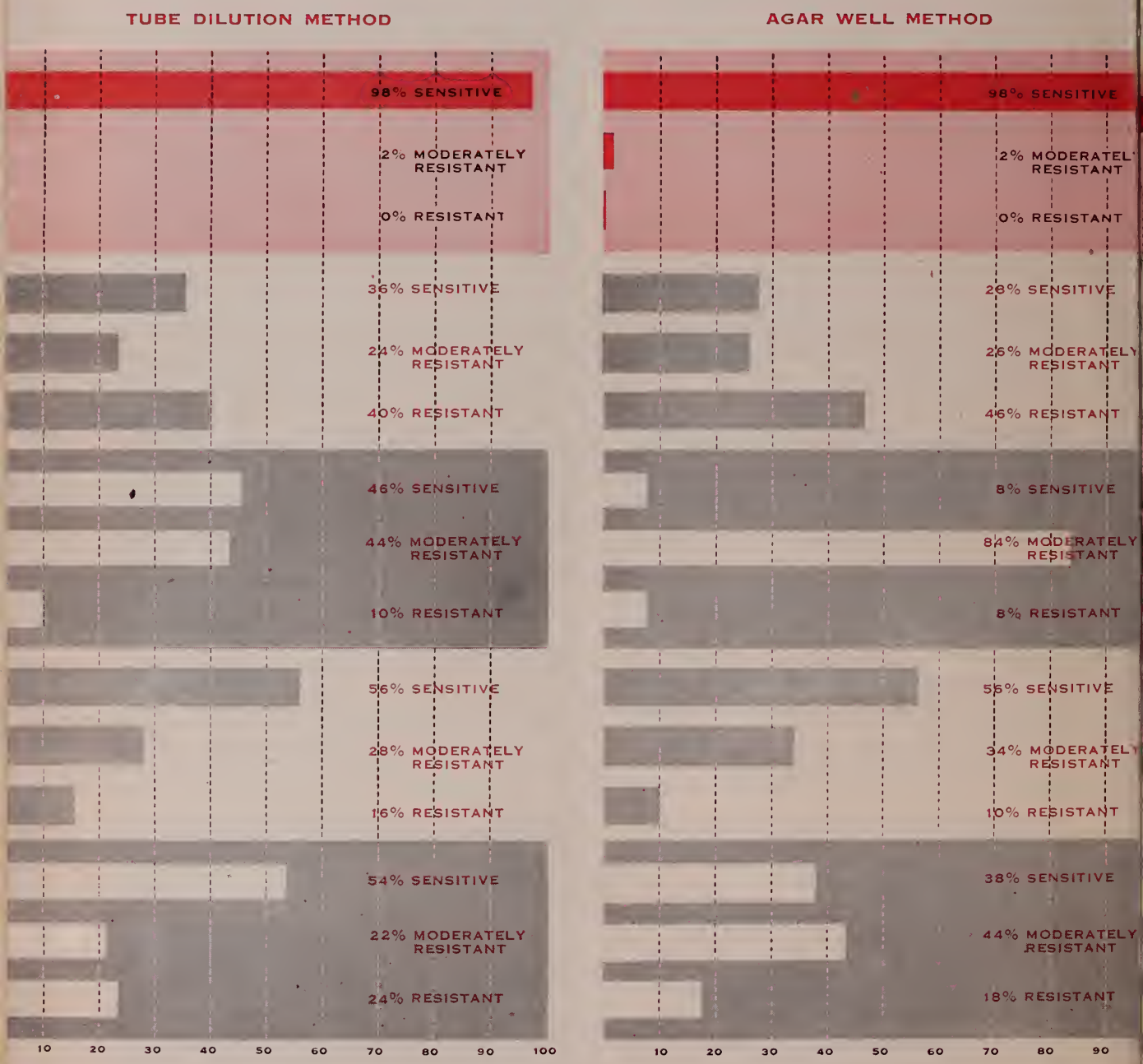

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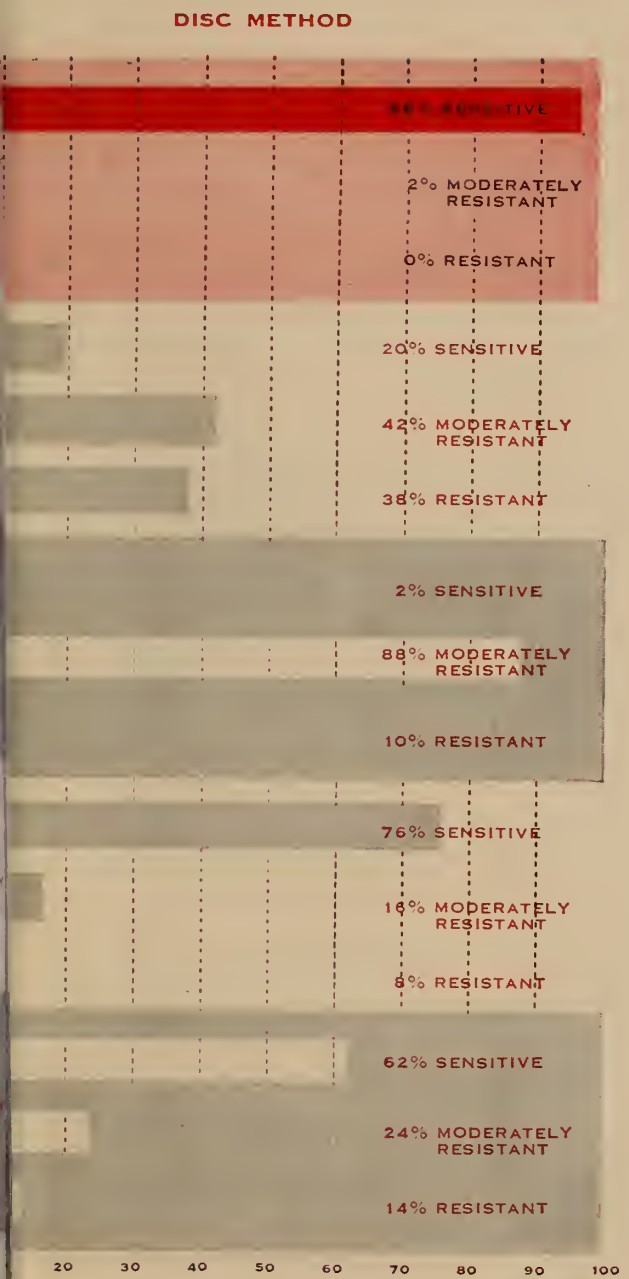

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(1) Jeans, P. C., in A. M. A. Handbook of Nutrition, ed. 2, Philadelphia, Blakiston, 1951, pp. 275-278.

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